

Marine Corps Gazette

MAY 1954
NUMBER 5
VOLUME 38

IN THIS ISSUE

SHOOTERS ARE MADE—MAKE 'EM.....	Col R. M. Wood	12
FIREPOWER AND COMBAT FORMATIONS.....	Col R. T. Vance	16
THE UNKNOWN SOLDIER.....	Maj W. F. McDonnell	24
TRAINED FOR SUPPORT.....	LtCol R. P. Keller	28
THE COMMANDANT'S HOUSE.....		32
JAPAN'S AMPHIBIOUS BID.....	R. B. Merrifield	40
YOUR OTHER RIGHT!.....	MSgt G. P. Finn	48
THE ANTI-BANDIT WAR (Conclusion).....	Col J. C. Murray	52
MESSAGE CENTER.....	1 KOREA AWARDS.....	27
OUR AUTHORS.....	11 IN BRIEF.....	50

COVER



Mount Fujiyama a short time ago was a symbol of enemy (Japanese) supremacy. Today it provides a majestic backdrop for Marine maneuvers. The quiescent volcano, which hasn't erupted since 1649, is the highest peak in Japan. Its near perfect cone shape is a familiar sight to men of the 3d Marine Division stationed at Camp Gifu, who constantly train on its slopes. Fuji's magnificence was caught in the shutters of 2dLt R. E. Black's camera during maneuvers of the 1st Battalion, 9th Marines. Back cover—a reminder—Armed Forces Day is May 15.

PUBLISHED BY THE MARINE CORPS ASSOCIATION

THE MARINE CORPS GAZETTE, copyright 1954 by the Marine Corps Association, Box 106, Marine Corps Schools, Quantico, Va., and published monthly. Entered as second class matter at the post-office at Quantico, Va., under the act of March 3, 1879. Editorial, Business Offices: Marine Corps Schools, Quantico, Va.; telephone ext. 4780 and 9717. Subscription rate, \$3.00 a year; single copy, 30 cents. Subscriptions of all members or honorably discharged former members of the Armed Forces include membership in the Marine Corps Association. Articles, photographs, book reviews and letters of professional interest are invited. If accepted, these are paid for at prevailing space rates. Material may not be reproduced without permission. Picture credits: All pictures official Marine Corps, Army, Navy, Coast Guard or Air Force photos unless otherwise credited.

Editor-in-Chief
MajGen R. O. Bare
Editor and Publisher
Maj Carl E. Walker
Managing Editor
Capt H. W. Henzel
Associate Editor
WO Fred T. Stolley
Business Manager
1stLt C. Armstrong
Editorial Board

Col R. C. Mangrum, Col J. C. Murray, Col J. D. Hittle, Col N. J. Anderson, LtCol J. A. Donovan, Jr., Maj H. S. Hill, Maj R. S. Stubbs, II, Maj G. A. Hanna, Capt R. H. Piehl, Capt J. B. Soper

Art Director
TSgt D. W. Kiser, Sr.

Art Staff
TSgt S. E. Dunlap, Jr., Sgt L. L. Preudhomme

Editorial Assistants

Sgt J. T. O'Sullivan, Mrs. Alice Paul

Business Staff

TSgt R. W. Boltz, SSgt M. Lehrer, Pfc D. E. Freedman, Pfc D. S. Davis, Pfc R. J. Johnson, Pfc G. Wiltz, Pfc J. J. Cetinski, Pfc J. K. McCormack, Pfc J. A. Palio, Pfc R. C. Parziale

Advertising Representative

Capt Murray Martin, USMCR
2 W. 46th Street, N. Y. 36
JUdson 2-1540

Opinions expressed in the Gazette do not necessarily reflect the attitude of the Navy Department nor of Headquarters, United States Marine Corps

message center

Turning the Wheel

... In reference to the article *A Turn At The Wheel* in the March issue, I feel that Sgt Shaw has brought out the great importance of small unit leadership in the amphibious phase of warfare.

... He states that "each squad should have one man who would be an effective leader replacement." I personally think we should have more than one trained squad leader replacement. After the troops of a unit are trained in their personal duties in a fighting team, rather than repeat the training program again and again until the men just get bored—we could spend our spare time by giving every PFC a chance to practice leading a fireteam, a squad and even a platoon in the field. Then when the leaders fall in combat, taking over would be a secondary nature for any Marine.

The same goes in learning other weapons. A rifleman should learn the BAR, machine gun, etc.

PAUL G. MARTIN

Kew Gardens, N. Y.

... The principle involved in Sgt Shaw's *A Turn At The Wheel* is as sound as any leadership principle, and was excellently presented. Let us not read it and just nod approval.

First, ... ascertain that the leader himself has a turn at the wheel. In far too many instances this principle itself is violated, usually unconsciously. Each of us should minutely scrutinize every order we give to make certain that we are not in some way usurping the prerogative of our juniors, for, like a cancer, uncontrolled outcroppings of this malignancy will eventually destroy the entire command structure of the Marine Corps.

A typical example is the squad leader (whom I would rank with the finest) who not once was, to my knowledge, permitted to lead his squad on either a rear or forward area patrol in Korea without the presence of an officer designated as

patrol leader of that squad patrol. Not even he had a turn at the wheel.

MORRIS D. COOKE
Capt, USMC

Parris Island, S. C.

From the Horse Marines

... CWO Kenneth Gilman's article on the value of pack horses, *When The Roads Give Out* [see our March '54 issue] did not include a fact worth noting [i.e.], men of at least one infantry battalion of the 1st Mar Div in Korea made extensive use, at least for a time (about April and May, 1951), of horses for transportation of supplies where tracked and wheeled vehicles could not go. . . .



Because their needs are simple—no "A" rations, no engine overhaul, no mail call, no education at Pendleton or Pickel Meadows, no rotation—CWO Gilman's pack animals should occupy a permanent, though perhaps secondary, spot on the T/E whenever Marine Corps units expect to fight over such terrain.

GEORGE S. CHAPPARS
MSgt, USMCR
Pittsburgh, Pa.

... While I was in Korea with the 5th Marines, our company was fortunate enough to capture a couple of the Mongolian ponies that Gunner Gilman mentioned in his article and they were as durable as he said they were, if not more. All the time we had these animals we never had grain or hay to feed them. The food

they got was what forage the territory offered. . . . These animals did a terrific job with this [small] amount of food and most animals could not have done it under these conditions.

So let's face it—pack animals are not obsolete by a long shot. Let's give the infantry a break, as Gunner Gilman said, "men were not meant to be beasts of burden."

JOHN C. HATFIELD
SSgt, USMC
Fairmont, W. Va.

... Mr. Gilman says, "The R4D type of aircraft . . . is capable of carrying twenty heavy horses . . . along with their pack saddles and equipment." One pilot's reaction was, "That's a lot of horse meat." Another said, "Maybe they're rocking horses."

The R4Q might take aloft about six heavy horses if they were stashed sideways, backwards and end-to-end; and if one of them didn't kick out the bulkhead.

After reading CWO Gilman's article, I'm all for bringing back the horse—which would have to shrink considerably to become airborne, 20 to an R4D.

GEORGE HANNA
Maj, USMC
MCAS, Quantico, Va.

... It is my belief that the continued use of the helicopter for delivery of supplies to inaccessible and remote areas would be much more expeditious and efficient.

PAUL F. YOE
MSgt, USMC
Amarillo, Texas

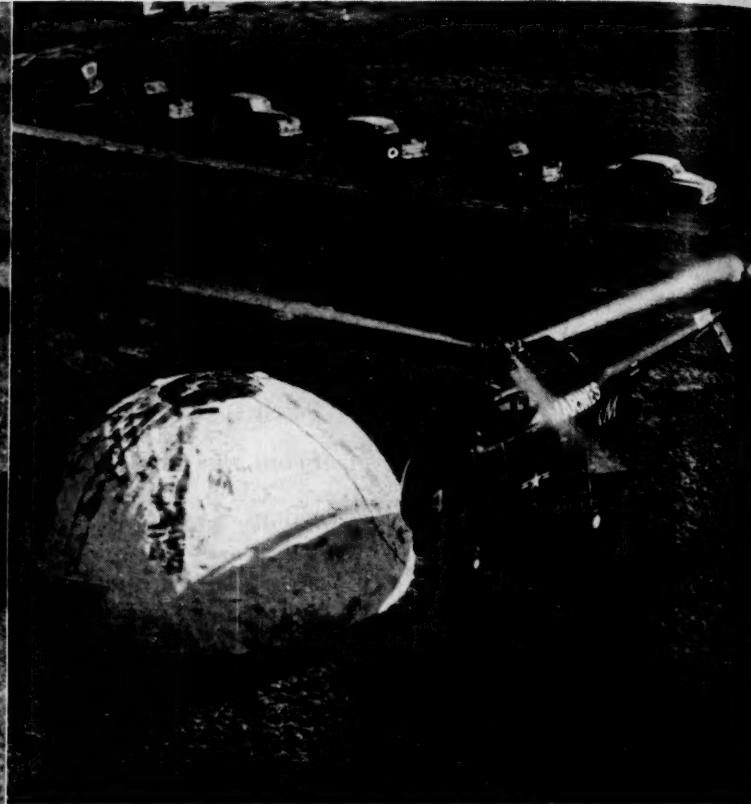
Mark the Odd—Paste the Even!

... Captain Fredericks' article *Targets* in your March issue may well cause many a long-gone Marine to turn in his grave or shock the visionary into spasms. Nevertheless, he has voiced an innovation we need, and need badly, in our combat training. The "moving target range" may not qualify us for the Expert Rifleman Badge, but it will give us tactical training . . . only one step lower than the real thing. I only hope his iconoclastic ideas are not read, given silent disapproval and buried in the old issues of the GAZETTE.

CHARLES R. STILES
Capt, USMC
Camp Lejeune, N. C.



FLYING BARRACK—This igloo-like shelter, designed for Marine Corps use in the field, can be transported by air. The dome is 18 feet high, 36 feet in diameter, and can



shelter up to 40 men. Even in a stiff wind, the 1000-pound plastic-covered hut can be moved easily from place to place by a Marine Corps HRS Sikorsky helicopter.

AROUND THE WORLD WITH SIKORSKY HELICOPTERS



WILDERNESS WINGS—A damaged light airplane was "rescued" from the frozen surface of Thunder Bay on Lake Superior by a chartered Sikorsky S-55 helicopter, and flown 25 miles to a repair base. Ambank Airlift, Limited, of Ft. William, Ontario, operates the new Canadian charter service, with S-55 equipment exclusively.



PRACTICE MAKES PERFECT—This unusual photo shows a Sikorsky H-19 helicopter over the Han River near Seoul in a simulated rescue of a downed pilot. The practice mission by a U.S.A.F. Air Rescue crew was similar to nearly one thousand actual rescues during the Korean war, made on land and at sea behind enemy lines.



HELICOPTER EXPRESS — Regularly scheduled Air Express flights in Southern California form a new service started last December by Los Angeles Airways, Inc., and the Air Express division of Railway Express Agency, Inc. Big Sikorsky S-55s, like that above, and S-51s, are used for the speedy shuttle to cities as far inland as San Bernardino.



SIKORSKY AIRCRAFT

BRIDGEPORT, CONNECTICUT

One of the Divisions of United Aircraft Corporation

THE NAVY MUTUAL AID ASSOCIATION

Protection in Force — \$82,000,000

Assets — \$26,000,000

Membership 11,000

Navy Department

Washington 25, D. C.



Organized July 28, 1879

**SERVING THE NEEDS OF
NAVY, MARINE CORPS AND
COAST GUARD OFFICERS
AND THEIR DEPENDENTS FOR
THREE-QUARTERS OF A CENTURY**

**THE NEW 1954
HIGH STANDARDS
with Compensator**



The only target pistols with
ALL THE ESSENTIALS

M54 Supermatic, Olympic & Field King with new "stabilizer" barrel, new push-button take-down for permanent barrel alignment and complete interchangeability, new firing pin design, new ramped front sight, new feed system with rigid sure-fire magazine.

Deluxe Additions to the Top Performers

EVALUATORS LTD.

G. O. Van Orden, Brig. Gen., USMC, Ret'd
Showroom No. 1, Woodland Dr., Triangle

QUANTICO, VIRGINIA

Slip-ups

Re: *Let's Learn to Write*, "You're not expected to be another Hemmingway."

... H - l, let's learn to spell first!"

CHARLESTON GAZETTE

Charleston, W. Va.

... Is that Ernest or Marmaduke?

PATRICK MAHONEY III

SSgt, USMC

Quantico, Va.

... I was amazed upon looking at your April issue to see the liberty you had taken with my article on SACLANT ... it would not have been as bad if your alterations were factually correct.

I am referring to the use of Admiral Wright's picture and the two statements "all controlled by one man: Admiral Jerauld Wright" and "Present Commander ... is Vice Admiral Jerauld Wright, USN."

... Admiral McCormick is the present [2 April 1954] Commander and will be until 12 April. Furthermore, the rank of the commander is a four star Admiral so *Vice Admiral Wright* will never be SACLANT....

L. M. MASON
Col, USMC

Norfolk, Va.

ED: Our apology to Admiral McCormick, Admiral Wright and Colonel Mason. No misrepresentation of fact was intended.

Old Corps Groans

... After eighteen years of reading letters to the editors of various service publications, this Marine would like to break down and get in "two bits worth."

I came to Korea with a draft of 52 master sergeants, all of whom were eager to get out here and do a job. Most of us with any Marine Corps feeling at all felt guilty about not having a DAK prior to the end of hostilities. The exigencies of the Corps takes care of that sort of thing and "it is not for us to reason why."

There were several with over 20 years' service and all had considerable WW II experience, mostly in the 03 field. All were career men,

and 90 per cent family men, with a sincere desire to be good Marines and do a good job. The bulk of these men had, in the past, held key jobs in their Marine Corps careers both in the FMF and on independent duty. . . .

To our disappointment we found the E-7 field [in Korea] crowded and men with years of experience and some with considerable technical training were thrown into staff sergeant and technical sergeant billets. In addition, to the consternation of at least one individual, when he pointed out that CMC ltr to all COs of 26Jun53 was not being complied with, he was immediately transferred. In several instances the above mentioned directive has not been complied with.

If a man is not thought to be qualified, why not give him a proficiency examination to determine his qualifications and see whether he is fit to hold his rank or not?

The trend in the last few years has been to take more and more responsibility from the NCO and give it to a young second lieutenant fresh out of Basic School, short on experience, but eager to learn. More times than not this lieutenant will serve his two years and never return to the Corps, but he will supervise career staff NCOs with experience learned the hard way. Our junior officers as a whole are fine officers and receive the best training in the Armed Forces for the job they have to do, but why does every simple detail and mission have to be directed by someone with a gold or silver bar?

We all know that the key, under any circumstances, to a happy tour of duty is a responsible job commensurate with rank—and keeping busy.

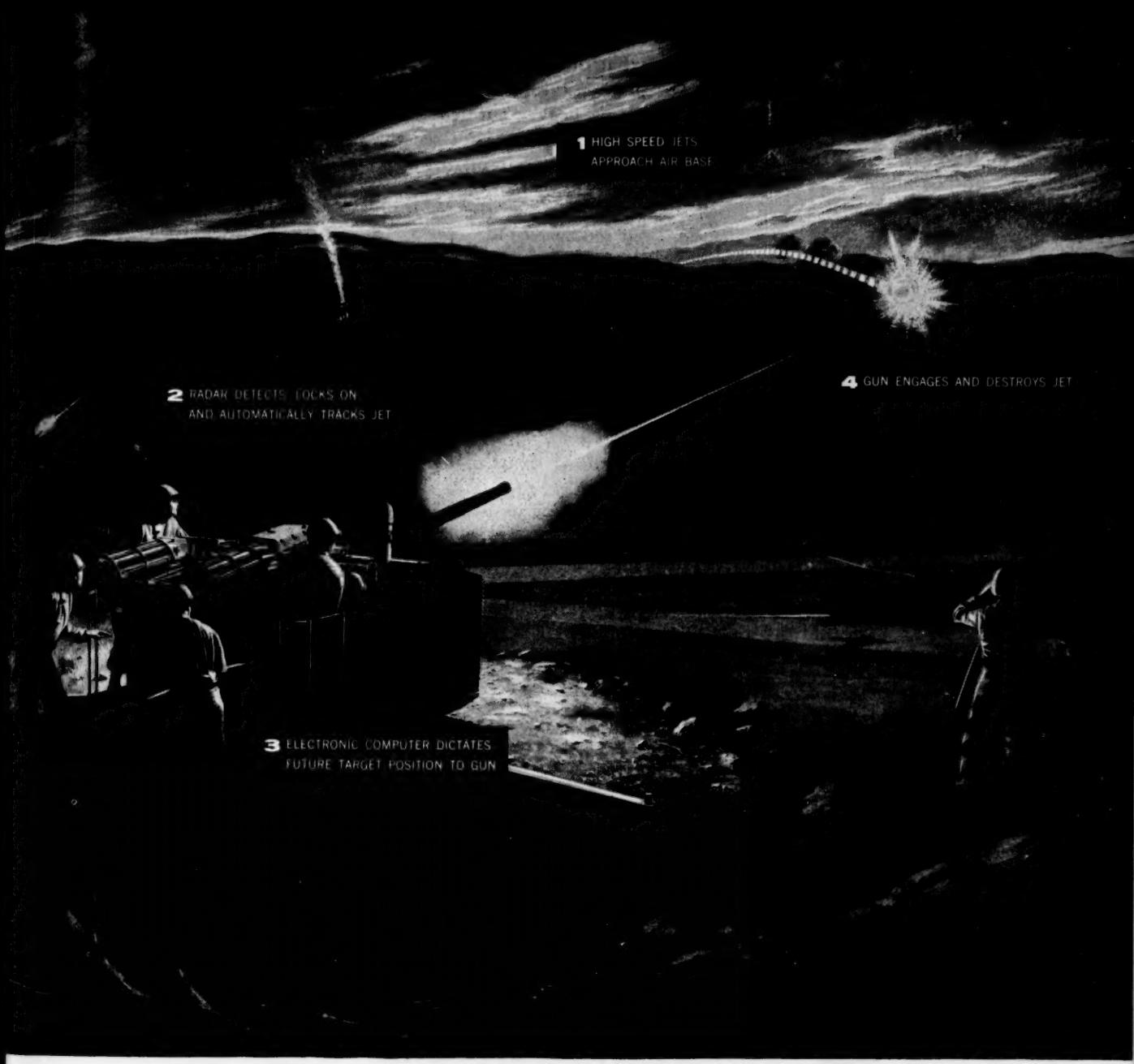
To your fine professional publication, I wish a "better Marine Corps."

EVERETT H. SHULTS
MSgt, USMC

Korea

... I am writing in reply to Mrs. Lois A. Christian's letter to your *Message Center* (March issue). I am in agreement with her.

I would like to congratulate Mrs. Christian and her husband on their fifth anniversary and wish them many more. But I would also like to



Army Unveils Skysweeper...

Deadly Accurate Anti-Aircraft Gun

THE STORY BEHIND THE STORY:

■ "HOW CAN WE stop hostile jets that slip through our primary defenses?" News-men covering Army Ordnance's demonstration of the Skysweeper saw the answer to attack by high-speed aircraft at medium range—and spread the story over front pages from coast to coast. It was the story of a gun that could "see" through fog and darkness . . . pick out an enemy within a 15-mile radius . . .

compute its speed, altitude and course in seconds . . . then, automatically aiming itself, shoot the plane out of the sky.

■ Actually the story began when Army Ordnance anticipated the threat of faster flying jets and started to work with Sperry on the problem. Through its pioneering in radar, Sperry engineers were able to design the "eyes" of needed performance. From Sperry's experience in electronics came the "brains" to compute precise firing information. Sperry's developments in servo mechanisms provided the "muscles" for rapid aiming and firing.

■ The Skysweeper gunfire control system which resulted from the cooperative efforts of Army Ordnance and Sperry is typical of the many systems which Sperry has developed working with various branches of the military to meet critical needs. Once developed, Sperry manufacturing specialists convert engineering designs into precision weapons for large scale production. Among similar projects at Sperry today are systems for bombing and navigation, missile guidance and naval gunfire control.

SPERRY GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION • GREAT NECK, N.Y.

remind Mrs. Christian that she has not joined the Marine Corps. She has married a Marine and as the wife of a Marine this does not put her in the position to say "we think a few changes could be made." Let us not have the wives interfere in this *Marine* business.

DONALD E. MONNOT
TSgt, USMC
Camp Lejeune, N. C.

... There has been a question in my mind as to the reason so many men are soured on the Marine Corps. There are the many reasons in newspapers (of which some may be correct) of why people are not making the military a career.

I think there is another reason that also contributes to the subject. It is the method of handling administration and disbursing in some units. The old saying goes "A man is happy when he is fed and paid." We might add to this "when his records are correct." . . .

The new men in the Marine Corps take it for granted (as they should be

able to) that the necessary recording has been taken care of. I realize the work load is heavy, but from personal observation, I do not see the midnight oil burning in many offices. There is a need for more instruction and supervision from the first sergeant and senior NCOs.

When "snuffy" in this Marine Corps feels that he is taken care of he will feel more like reenlisting.

FLOYD M. BURGESS
MSgt, USMC
Oceanside, Calif.

"Learn and Do"

... I read the last part of *Up With The Tanks*.

... I am in the administrative field with only a little knowledge of the infantry and tanks, and this article helped me quite a bit.

I was in combat only two days at Hagaru-ri before I was wounded so I didn't have a chance to learn much. The only other time I learn anything about infantry tactics is when I study for my GMST. I feel

that there should be something done about this. The old saying is, "First an infantryman, then a specialist," is my motto and should be a motto of the Marine Corps.

Why couldn't a school be set up for specialists where they could "learn and do" what they should know. This, I think, should especially apply to Staff NCOs. Schools such as this could be formed at Marine Corps bases. I know there are NCO schools, but they have men who are mainly in the 03 field and not men who are specialists.

DONALD L. ZUMWALT
SSgt, USMC
Oklahoma City, Okla.

Hold That Line!

... I have read many suggestions for improvement in the style of the present Marine Corps uniforms. Blouse against jacket, and many other arguments. The best yet is the proposed summer uniform by Pfc Frank Schlagetter: green uniform with red stripe. The red stripe has always been reserved for NCOs and officers. Are we going to discard traditions of the Corps for a proposed uniform with a red stripe? If Pfc Schlagetter wants a red stripe, I suggest that he be a good Marine and make Corporal so he may wear his red stripe. Let's forget about these new uniform proposals and concentrate on wearing the one we now possess in a manner befitting Marines.

J. J. BLANK, JR.
SSgt, USMC
New Haven, Conn.

PAY
LESS
NOW

GOVERNMENT

Savings

to 30%

AUTO INSURANCE

Available ONLY to officers and 1st 3-graders, who are married and at least 25-active, reserve, or retired. We have no agents and deal direct. Savings up to 30% from prevailing board rates in your territory, is passed on to you if you can qualify. Protection against loss from bodily injury and property damage liability; medical payments; accidental death; comprehensive personal liability and fire & theft coverage. Covers collision & towing. World-wide claim service. Former Marines who know your problems handle your policies. Greatest savings possible to preferred risks.

HOUSEHOLD & PERSONAL PROPERTY

This floater policy covers everything personal anywhere in U.S. or abroad. It protects your household goods, clothing, uniforms, furniture, jewelry and valuable personal effects. Insures you against 14 named perils. Best type of coverage at lowest cost.

SERVICES INSURANCE UNDERWRITERS

(NOT AFFILIATED WITH U. S. GOVERNMENT)

Government Services Insurance Underwriters
Crockett and Presa Streets, San Antonio, Texas

NAME _____
ADDRESS _____

AGE _____ RANK _____ MARRIED _____ SINGLE _____

CAR DESCRIPTION _____ ANNUAL MILEAGE _____

BUSINESS USE AGES OF DRIVERS

AUTO IN U. S. AUTO OVERSEAS PERSONAL PFTY. *

MAIL COUPON TODAY

... In 11 years in the Marine Corps, I have made five trips to clothing issue to conform with major changes in the winter service uniform.

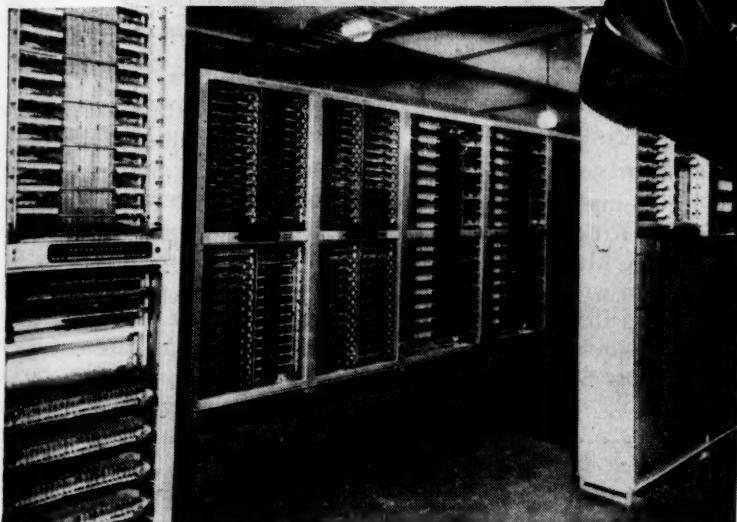
First, out the window with the shined leather belt. Second, hang the long blouse in your locker (jackets are prescribed for inspections). Next, trousers with pockets and two buttons on the rear for purpose of buttoning to jacket. Fourth, who put that long blouse in the Dempster Dumpster?—jackets go out September 1954. And somewhere along the way my wool overcoat acquired too much mileage and was replaced with the raincoat and liner.

This is fine for the Wool Growers Association but after awhile one gets dizzy, not to say confused. (Also one

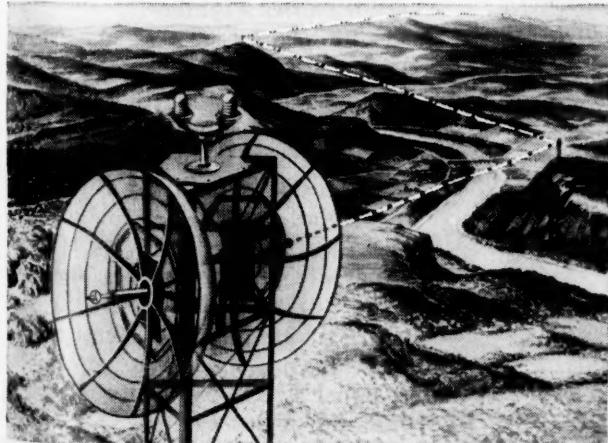
5,300 INDEPENDENT TELEPHONE COMPANIES

**...A GROWING
NATION-WIDE INDUSTRY**

**...and a growing outlet
for IT&T engineering
and manufacturing
facilities.**

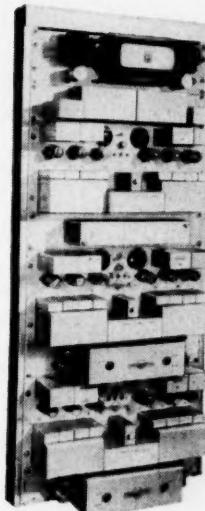


Typical of advanced design and performance in dial telephone switching systems is Kellogg Crossbar, developed by Kellogg Switchboard and Supply Company, a division of IT&T, for use in telephone exchanges. Together with Kellogg Relaymatic, as well as Step-by-Step and Rotary dial switching equipment made by Federal Telephone and Radio Company, also a division of IT&T, Kellogg provides a complete range of automatic switching systems as well as other equipment and supplies for the independent telephone industry.



Microwave radio relay carries telephone circuits over mountains, rivers, deserts, lakes and other difficult terrain without wire lines. Between Bartow and Tampa, Fla., the Peninsular Telephone Co. has installed the first independent telephone company microwave link connecting with the nation-wide inter-toll dialing system. The complete equipment was designed by Federal Telecommunication Laboratories, research division of IT&T at Nutley, N. J.

Greater capacity for existing telephone lines is made possible by the compact and economical "carrier" system of telephone communications. Carrier can provide as many as 18 additional circuits, superimposed on existing lines without the necessity of stringing more wires. Short, medium and long-range types for voice as well as signal transmission are available. With the Kellogg Type No. 5 Carrier, shown at right, four simultaneous conversations may be carried on one wire circuit.



The same skill in manufacturing and research builds better performance into products for home, business and industry made by the manufacturing divisions of IT&T—a great American trademark.

IT&T



INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION
67 Broad Street, New York 4, N. Y.

For information about telephone equipment and supplies, write
Kellogg Switchboard and Supply Co., 79 W. Monroe St., Chicago 3, Ill.

wonders if his clothing allowance is enough to keep up with the changes.)

Now how about gabardines (we might just as well make it an even half-dozen changes) for all enlisted men. They would look snappier, hold a press better and be an all-around more respectable uniform.

But let's get together and make this change last the life of the material.

IRVIN R. STONE
TSgt, USMC

San Diego, Calif.

The Man

... In reading Mr. Lynn Montross' article *The Man With The Rifle* it reminded me of a cartoon drawn by Newton Pratt which appeared on the editorial page of *The Sacramento Bee* several years back. The cartoon was titled *Pushbutton War*. It showed two generals poring over maps and looking to the door where an infantryman was standing in full battle gear. The man with the rifle was saying, "You rang, sir?"

In my opinion, and I'm sure Mr. Montross will agree, the cartoon shows that it is still the man who has

to take the hill or pillbox and is the one who wins wars.

JOHN D. TREANTOS, JR.
Cpl, USMCR

Sacramento, Calif.

"Decorations" Plaudits

... Congratulations on Mrs. Jane Blakeney's *Your Korean Decorations*; being a Korean veteran myself it answered many questions for me. Also, since I am now serving with the Marine Corps Reserve here in Minneapolis, it helps me answer the many questions I receive from other veterans.

Thank you again for the fine, interesting articles and keep them coming.

WILLIAM F. WILLS, JR.
SSgt, USMCR

Minneapolis, Minn.

Required Reading

... Having just completed the last chapter of *The River and The Gauntlet* by S. L. A. Marshall, I find myself compelled to write this letter in the earnest hope that the knowledge of the book's presence and the value of its contents be realized by

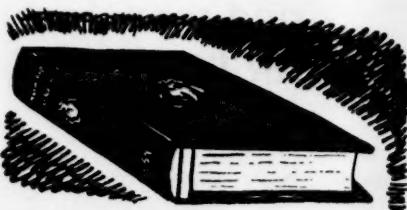
more Marines. I consider it a must for every officer and NCO. . . .

It is a book whose every page is a review of basic military subjects and the consequences realized by not having followed the rules.

This book should be required reading for every officer in the Basic School.

TERRELL W. HILL
1st Lt, USMCR

Columbus, Ga.



Back Copy Binders

... Why doesn't the GAZETTE offer for sale, or as a premium for a three-year subscription, a binder for back copies of the GAZETTE. It could be of the loose-leaf type they use in libraries to bind current copies.

I know you offer bound copies of the GAZETTE for sale yearly, but after subscribing to the magazine I don't feel that I should have to fork out an extra \$5.00 each year so that I can keep my 12 copies of GAZETTE.

I feel sure that there are many others besides myself who would purchase such binders.

GAYLER SWAIN
TSgt, USMC

Dumfries, Va.

ED: Let's hear from our readers. We could make them available through our bookshop.

All-Weather Fighters

... I applaud Captain R. L. Parnell, Jr., for his article on all-weather fighters.

Our nation could not do better than to invest a few dollars in a tremendous deterrent to aggression—a deadly all-weather air arm.

As a former World War II Army Air Force pilot (is this blasphemy in your GAZETTE?), I recognize the need for a 'round-the-clock defense against a sneak enemy air strike. A crippled bomber is too busy fighting for its life to seek out a target. . . .

Keep up the good work. I enjoy your magazine and, if I ever enlist again, I'll join the Marines.

ALVIN G. FENNER
The Post-Standard

Syracuse, N.Y.

Jos. A.
WILNER
& Co.
CUSTOM TAILOR
SINCE 1897

Your uniform will be individually tailored to your exact measurements with all basted fittings so you're sure of a perfect fit that compliments you—constructed from iron-tough, USMC approved fabrics so you're sure of lasting quality. Wilner's skill gives you the best uniform at reasonable prices. Terms gladly extended. Mail orders promptly filled. See or write Jos. A. Wilner & Co. today!



CORNER 14TH & H STS. N.W., WASHINGTON, D.C.

Dependable

No delays...no alibis. Start on schedule...arrive on schedule.

That's the kind of performance you expect from the railroads—and you get it.

The railroads have the resources, equipment, manpower and experience it takes to handle military traffic. Inspection, maintenance, equipment and operation meet all governmental safety requirements.

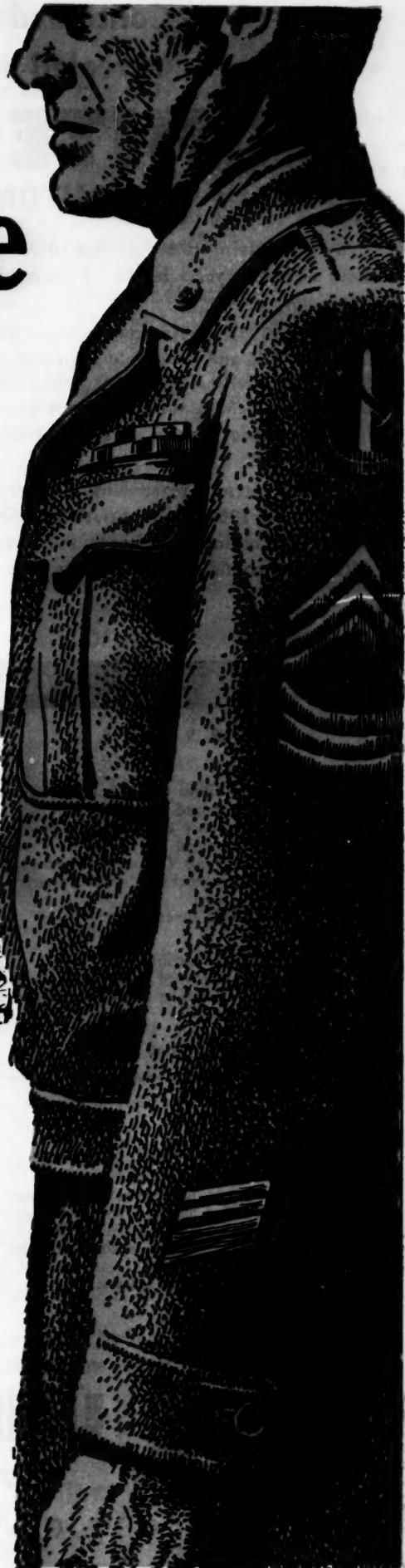
When there's a transportation job to do, there's one best way to do it: by rail!



Get the facts. Special discounts for military travel. Also reduced fares for furloughes. Ask your railroad representative.

Railroads of the United States

DEPENDABLE Transportation



**Continued GROWTH and PROGRESS
revealed in 32nd Annual Report of**
UNITED SERVICES
AUTOMOBILE ASSOCIATION

It is gratifying to report that 1953 was one of the most successful years in the 32 years history of the Association.

During 1953 the Association wrote \$18,751,449.35 in automobile and household insurance premiums, an increase of \$5,691,212.36 over 1952. This increase in business of 43.58% was the largest premium volume of new business written in any year of the Association's history.

Several factors enter into this very satisfactory showing. In 1952 the Association extended its services to the Continent of Europe, thus permitting many officers to continue their policies with the Associa-

tion when ordered to Europe. Many other officers took out their first policies with the Association because of this territorial extension. Further, persons in active military service continued to find it difficult to obtain insurance through normal channels. The Association is particularly geared to serve this type of risk as the increase in the total number of members shows. As of December 31, 1953 there were 179,840 members carrying 227,380 policies, reflecting an increase of 34.31% in members and 33.71% in policies.

C.C. Cheiner
Secretary-Treasurer



Comparative Financial Statement

ASSETS	December 31, 1952	December 31, 1953	Increase or Decrease*
Investments:			
United States Government Securities (Amortized Value)	\$ 2,779,975.95	\$ 3,732,123.87	\$ 952,147.92
State, county and municipal bonds (Amortized Value)	9,523,089.79	13,649,023.05	4,125,933.26
Other Bonds (Amortized Value)	85,984.56	85,960.06	24.50*
Common stocks (Market Value)	62,413.46	61,605.84	807.62*
Total investments	\$ 12,451,463.76	\$ 17,528,712.82	\$ 5,077,249.06
Cash and bank deposits	2,164,172.89	2,500,198.49	336,025.60
Premiums in course of collection — net	597,824.08	973,729.80	375,905.72
Home Office Building and Grounds — net	1,172,596.44	1,438,785.85	266,189.41
Interest accrued	76,405.44	116,532.06	40,126.62
Total admitted assets	\$ 16,462,462.61	\$ 22,557,959.02	\$ 6,095,496.41
LIABILITIES			
Unearned Premiums	\$ 6,814,880.15	\$ 9,687,944.50	\$ 2,873,064.35
Loss Reserve under Texas Requirements	4,308,973.76	6,146,075.74	1,837,101.98
Reserve for Premium Tax	129,967.83	179,941.28	49,973.45
Savings Accrued to Date and Additional Amount for Savings Required under Texas Insurance Department Regula- tions for the Succeeding Calendar Year	4,208,640.87	5,543,997.50	1,335,356.63
Reserve for Unexpected Losses	<u>1,000,000.00</u>	<u>1,000,000.00</u>	<u></u>
Total Liabilities	\$ 16,462,462.61	\$ 22,557,959.02	\$ 6,095,496.41



UNITED SERVICES
Automobile Association

DEPT. G, 1400 E. GRAYSON STREET • SAN ANTONIO 8, TEXAS

our authors

Former Historian for the Marine Corps Historical Branch, **Robert B. Merrifield** is the contributor of *Japan's Amphibious Bid* on page 40. A graduate of the University of Oregon with a B.A. degree, and the University of Chicago with an M.A. degree, Mr. Merrifield also attended Texas Tech and is presently enrolled at George Washington University. His first attempt at magazine writing was an article published in *Mid-America* entitled *The U. S. Magazine Press and Cuba, 1906-1933*.



MR. MERRIFIELD

Now working as Intelligence Analyst, Ordnance Corps, Aberdeen Proving Ground, Md., Mr. Merrifield lives with his wife and 15-month-old son, Robert Jr., in Charles City, Virginia.

Heavily-laden with full field equipment, HQ Co. of the 4th Marines lined up one spring morning in 1940 to take their regular weekly conditioning hike through the streets of the International Settlement in Shanghai. Two hours later, after sweating their way around past the ordure station and other points of interest, they eased their packs off aching shoulders and observed that if the officer who led the troops had been wearing a "heavy," the pace would not have been quite as swift. The officer, a young lieutenant, heard the growls. The next



COL VANCE

week, before the hike started, the lieutenant traded his musette bag for a field music's heavy marching order and led the company out on a real killer. After that, belts were tightened and there was voluntary

curtailment of liberty before hikes—also the growls ceased.

Author of *Fire Power and Combat Formations* (page 16) **Colonel Robert T. Vance** was the lieutenant who led the memorable hikes in Shanghai. He has since led many combat formations as battalion commander of the 3d Parachute Bn, (WIA Bougainville) and of the 3d Bn 21st Marines and the 3d Tank Bn. He has had staff assignments with the 1st Mar Div, HQMC and the 3d Mar Div. He attended the Command and Staff College, Ft. Leavenworth, Kansas, before serving at the Marine Corps Schools, Quantico, and is now assigned as Amphibious Plans Officer, CINCNELM. Regular readers will remember *Shanghai Incident* written by Colonel Vance for the October 1953 GAZETTE.

Raconteur, writer and professional Marine, **MSgt Gerald P. Finn** has related his sea stories to open-mouthed audiences from Soochow Creek to Brooklyn Navy Yard. Born in Lancashire, England, MSgt Finn attended St. Edwards College in Liverpool and served a cruise in the Army before he enlisted in the Marine Corps. Until 1942 he served as a bandsman and "whammed that cowhide" as he puts it in his article, *Your Other Right*, on page 48. During WW II he was sergeant major of the 7th Service Regiment and later he served at Brooklyn Navy Yard and with the 3d Marine Corps Reserve District. He landed at Inchon in 1950 with the 11th Marines and, returning from Korea, was assigned to Recruit Depot, San Diego. At the present time he is sergeant major of the 1st Infantry Training Regiment, Camp Pendleton.

In his spare time during his 17 years' service with the Corps, MSgt Finn has written fiction for *Leatherneck* and other publications. Old 4th Mariners will remember him as the author of *After Liberty Call*, a regular feature of the *Walla Walla*, newsweekly of the 4th Marines in Shanghai during the '30s.

A member of the Marine Corps Reserve Honorary Retired List, **Major William F. McDonnell**, wrote *The Unknown Soldier*, (page 24). Major McDonnell joined the Marine Corps Reserve in 1933 and was commissioned in the District of Columbia Reserves the following year. Called to active duty in 1942, the major served as commanding officer of Guard Battalion and as Police Officer at Quantico until 1944. After a short tour at Camp Lejeune as Commanding Officer of Serv Co, Serv Bn, he served as HQ Bn Adjutant, 1st Mar Div in the Solomons, Okinawa and in China. The major was released to inactive duty in 1946.



MAJ McDONNELL

Major McDonnell is past Commandant of the District of Columbia Marine Corps League and a member of the bar association of the District of Columbia, North Carolina and Virginia. He is presently practicing law in Washington.



MSGT FINN

Author of *Trained For Support*, (page 28), **Lt Col Robert P. Keller** entered the Marine Corps in 1940 and received his commission through the aviation cadet program in 1941. He then was assigned as an Instrument Flying Instructor at Pensacola and later was commanding officer of several fighter squadrons in the Northern Solomons and



LTCOL KELLER

Solomons and North China. Before commanding a carrier based fighter squadron in Korea, the colonel graduated from the Air Command and Staff School of the Air University. He wears the Silver Star Medal, the Distinguished Flying Cross, Air Medal, Purple Heart and the Chinese Nationalist award, Order of the Cloud and Banner. He is currently a member of Operations and Training Branch, Division of Aviation, Headquarters Marine Corps, Washington, D. C.

Shooters Are Made —



MAKE 'EM

It's SPRING AGAIN, AND ALL OVER the Marine Corps shooters are limbering up their slings with their sights set on the "big shoot" held at Camp Perry each year.

Last month, tyros and old-timers alike battled for team positions in the Western Division matches at San Diego and at the Southeastern matches at Camp Lejeune. This month shooters will be squeezing them off in the Eastern Division matches at Quantico, and immediately following, the top winners will get together and slug it out in the Marine Corps matches. Next will come the Elliot and Wirgman Trophy shoots and the inter-Division rifle and pistol matches.

Finally, when all the scores are in (and the brass has been picked up), a select group will be picked to represent the Marine Corps at the National Matches — it will be the Corps' varsity of shooters . . . "The Big Team."

Most people know that Marines participate in the National Matches at Camp Perry, Ohio each year, but

few know why they take part in team matches or what benefit the Marine Corps derives from "all that shooting." Indeed, I'm sorry to say, few Marines today realize the purpose or the value of the National Matches themselves.

The National Matches are organized and conducted by the National Rifle Association at Camp Perry, an Ohio National Guard Camp on the shores of Lake Erie. The perennial shooting classic was created by a law enacted by the Congress in 1902.

The 1953 matches consisted of individual and team NRA championship matches (pistol — .45, .38, and .22 caliber) small-bore rifle (.22 caliber) and high-power rifle (.30 caliber) which were open to NRA members. During the same meet, the U. S. Army conducted a small arms firing school, and the National Trophy matches (individual and team, rifle and pistol) were also held.

These latter matches are always conducted under the approval and supervision of the National Board for the Promotion of Rifle Practice,

a board established to administer the funds appropriated by the Congress for the purpose of conducting the National Matches. This Board prepares the Rules and Regulations to govern the National Trophy Matches each year. Since the board is an agency of the Department of the Army, the rules take the form of a special bulletin covering the conditions of the trophy matches.

The majority of the shooters at the National Matches are civilian shooters who pay their own way and buy their own weapons and ammunition. Many non-shooters are prone to classify the National Matches as a gathering of hobbyists. But, the National Board was organized to serve the needs of the country as a whole, and the matches held under its auspices cannot, in all fairness to the participants, be termed a hobby.

The function of the National

The Corps has always done well at the National Matches.

But what will happen when the new rules take effect?



By Col R. M. Wood



Matches, as MajGen Edson, USMC (Ret'd), executive director of the NRA, has explained, is to produce *instructors* in marksmanship, or to increase the capability of the shooter as an instructor in the matter of how to hit a mark.

Behind this statement of General Edson lie the reasons and justification for Marine participation in the annual National Matches.

In 1953, as in previous years, the Marine team won numerous individual matches and team trophies. One of our four-man rifle teams, shooting M1s, won the National Trophy Rifle Team Match. Most shooters would rather win this match than any of the others. Several Marines won, or placed in, matches with perfect

scores. The quality of M1 shooting was such as to command the admiration of civilian and military competitors alike. And while the M1 teams and shooters were upholding the tradition of Marine Corps shooting, other Marines shooting the NRA rifle (bolt action), were making a name for themselves. (The pistol shooters had done likewise the previous week.)

In view of the attainments of previous years and at the 1953 Matches, it seems plausible to assume that as long as there are National Matches, in which Marine Corps Teams are entered, we will continue to do as well as we have in the past. Such an opinion has been expressed by many Marines—both shooters and non-shooters.

On the basis of past performance such a deduction is acceptable. However, in the past few years, many field officers have developed an unhealthy attitude toward shooters and rifle shooting in general. This attitude can do great harm to Marine rifle marksmanship. These antagonists of shooting would classify those who aspire to shoot in the annual divisional and Marine Corps Matches, and later in the National Matches, as "competitive shooters." To use the term "competitive shooting," is to indicate ignorance of the purpose of the Marine Corps matches and the National Matches.

This attitude — with its attendant effects — coupled with likely new eligibility requirements for shooting in the National Trophy Rifle Team Match, may very soon have an adverse effect upon the quality of shooting done by Marine teams in the National Trophy Matches.

Briefly, the proposed eligibility requirements would limit team shooters to individuals under 45 years of age. Also, the size of the team would be increased from four shooting members to six, with three shooting members being individuals who have never before fired as a member of any National Trophy Match Team. One of the objects of these new changes is to encourage more young men to take up shooting. While the rules are designed to affect primarily civilian shooters, all the service teams must abide by them.

The Marine Corps National Rifle Team of 1953 fired in 22 selected matches. The average age of the Marines who won or placed in the top 5 positions was 38 years, or men with an average of 17 years' service. Only six out of 24 were less than 30 years of age! Of 11 matches won by Marines, eight were won by men over 40 years of age, the average age

being 45! This means that great reliance must be placed on the older shooter, the man with the shooting experience, the man who, in all probability, considering age and length of service, may not be available to the team as a shooter next year. Yet in the future, only three shooting members out of each team can be old shooters! Therefore the infusion of new blood is a continuing problem and a necessity if we are to continue to make impressive showings.

The development of new shooters is attained in the Marine Corps through: first, qualification in Boot Camp; second, through requalification shooting; and third, in the divisional and Marine Corps Matches.

The most vital step is the first, in Boot Camp, where many Marines first become acquainted with the techniques and mysteries of rifle shooting—of mirage, wind and light effects. During this initial step, Marines usually decide that they can or cannot eventually become team shots. However, rifle shooting is like most other fields—one must practice, practice, and practice to be tops. The short time available in qualification and requalification programs



NRA Photo

is generally insufficient to produce a really good marksman. The divisional and Marine Corps matches provide much better opportunities for marksman development, for those who are fortunate enough to be able to—and in some cases allowed to—participate.

"Allowed" is a harsh word, but it is unfortunately correct in many cases and it results from the attitude mentioned earlier. Many officers do not give small arms shooting the support it deserves, or the support within their power. Too many officers place this type shooting in the same category with sporting events. This is possibly because men aspiring to enter the divisional or Marine Corps Matches are considered "lost" to their unit for weeks or sometimes months.

To classify shooting as a sporting event is unfair to the shooter (for he is discouraged or not permitted to "try" for the matches) and to the Corps, because it denotes a misunderstanding or lack of appreciation of the real purpose of the matches and of the effect, in the long run, upon the combat readiness of the Marine Corps.

In the Marine Corps, where everyone must know how to shoot small arms accurately, it is a disservice to oppose the marksmanship program. Such opposition reflects upon the ability of the Corps to train Marines to be the best combat shooters possible. Unless we can shoot, and do it well, the Fleet Marine Force won't be worth its salt.

The solutions to the problems facing us—obtaining new shooters



1953—young shooters did well in the Marine Corps Matches



Representing the Marine Corps in the National Matches at Camp Perry in 1953 . . . "The Big Team"

for future National Matches do not come easy, but the problems can be solved. One obvious step would be to organize (under a T/O) the Marine Corps rifle and pistol team and transfer to the team all of the personnel required. Under such a system, the men who "make the team" would not be considered lost to their organizations, since they would be detached from their units and the vacancies created could be filled. I do not favor this solution, although such a step would definitely work to the advantage of the team. Such a procedure has previously been partially adopted. My objection is based on the fact that the shooters, once the team is disbanded after the National Matches, would likely not return to their former organizations, where they are known and where they would be able to encourage and train other men to do better shooting.

A partial solution to the problem is in the establishment or re-establishment of indoor small bore ranges and the scheduling of intramural, interpost and interservice matches. Small bore shooting is one of the finest ways to develop high power marksmanship. It doesn't cost much and it can be conducted night or day, summer or winter, rain or shine. Invariably, shooters who have actively participated in small bore league shooting become better high power marksmen when the outdoor shooting season begins. In small bore shooting, one must really hold 'em and squeeze 'em to get a decent score. To be successful, and a calculable benefit to the Corps, a pro-

gram of this type should be promoted on a Marine Corps-wide basis.

A third proposal and one similar to the second, is the establishment of post and station (high power) rifle and pistol clubs. These need not be established by direction of the Commandant, but the various clubs should be associated with the National Rifle Association to be most effective. The availability of ranges capable of handling high power rifles would be a problem to some stations if they were not able to utilize a nearby service operated range. However, there are hundreds of rifle ranges belonging to NRA affiliated rifle and pistol clubs throughout the United States, available usually through the secretary of the club.

The last proposal is *the* solution but unfortunately the hardest to attain. If we could convince all officers, and especially unit commanders, that it is important to the Corps to emphasize small arms shooting, our problem would be licked. I believe the primary reason for non-support or lack of interest in small arms shooting is because there are many field officers today who never really became acquainted with the M1 rifle.

It was a combination of several factors that caused such a situation. It was some time after the start of World War II that all Marine Corps units were supplied with the new rifle. With the war lasting as long as it did, there weren't very many officers who had the opportunity to become familiar with its capabilities, especially precision shooting.

Today, when one of these officers goes out on the range to re-qualify, he doesn't have time enough to test his pet theories; he doesn't shoot well—is convinced he can't shoot well—and as a result loses interest in match shooting.

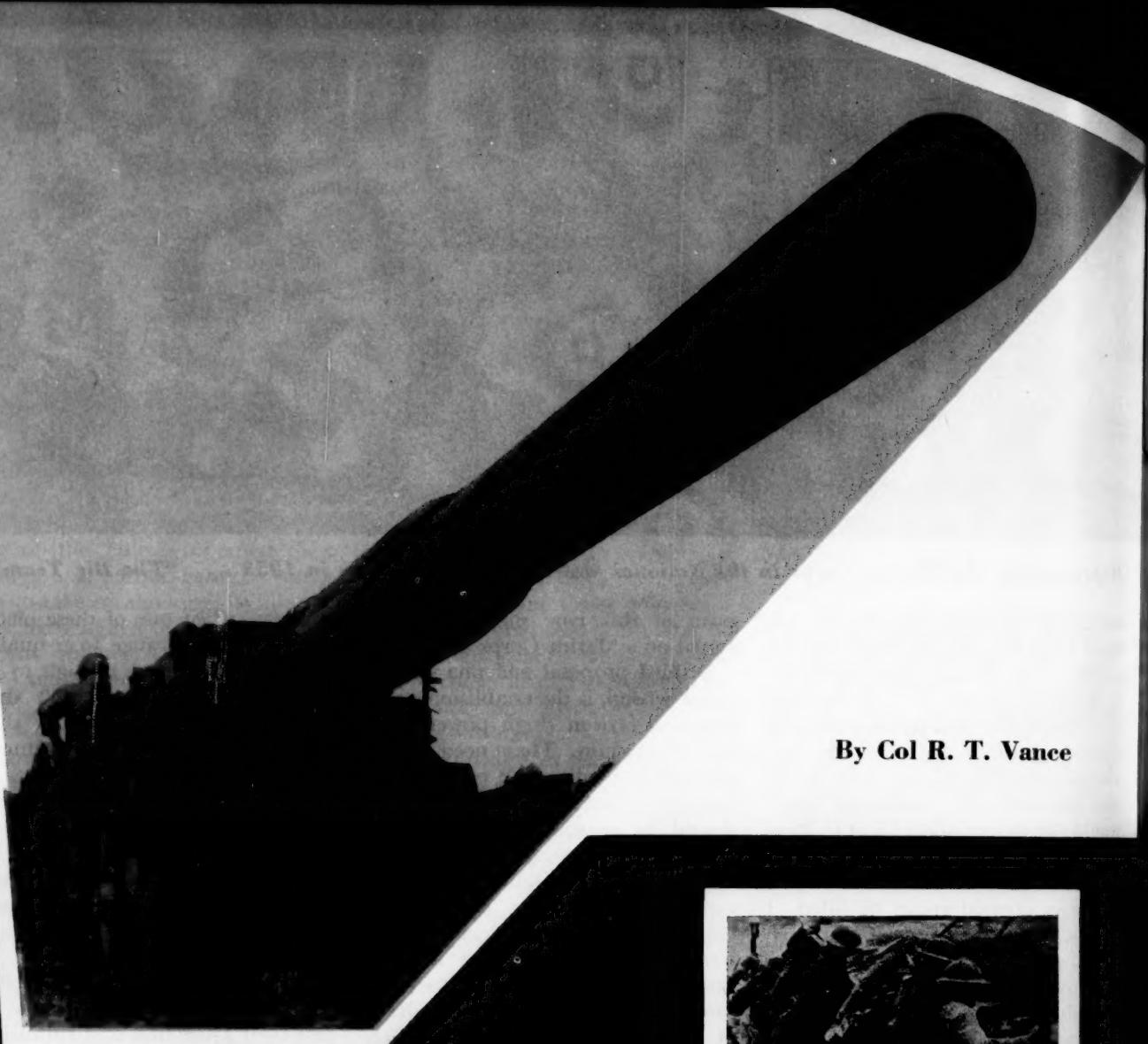
The uninformed frequently question the time and money expended to conduct and support rifle matches. If the matches were conducted solely for the gratification and amusement of the individual shooters such criticism would be justified.

However, when matches produce better instructor-shooters who can pass their know-how and enthusiasm on to other Marines, making them better combat marksmen, then the time, money and effort are justified.

The ability to hit a bull's-eye on a range certainly doesn't make a man a finished combat marksman, but it does help. It's a vital increment of Marine Corps prestige and an essential element to our defense. USMC

Old-timers won at Camp Perry





By Col R. T. Vance



FIREPOWER AND COMBAT FORMATIONS

Evolution of warfare demands flexibility of formations as well as techniques

"IN AN ATTACK OR STUBBORN defense the firing line should have a density of one man per yard of front occupied." (Infantry Drill Regulations — 1913).

During the action in Korea, if we consider only the rifle companies actually deployed along the UN line, the average density of the firing line was approximately one man per 15 yards of front. Of course, you may say "Look at the difference in firepower!" Yet in terms of small arms, and that includes machine-guns, the average potential rate of fire on a thousand yards of front is approximately the same in Korea today as it was for a similar front in World War II, World War I, the American Civil War, and even the War of 1812! It is between 6,000 and 7,000

rounds per minute. The vast difference lies in *supporting* firepower.

Firepower is the sum of given weapons together with ammunition and attendant equipment plus operating personnel. However, the organization to man and control weapons is a derivative of the characteristics of the weapons themselves. From this we might deduce a hypothesis that the combat formation and organization of the rifle battalion, as the basic tactical unit, and of the division as the basic unit of combined arms, are functions of the effective range and rate of fire of infantry weapons and the effective range and rate of fire of the divisional artillery. With this hypothesis in mind, let us see how our present organization developed.

The corps was originally the basic unit of combined arms. Developed by the French Revolutionary Armies shortly after 1796, the idea was applied most successfully by Napoleon. In accordance with his doctrine "March separately, attack together," the French corps was a semi-permanent combat command composed of infantry, artillery, cavalry and some service troops. Infantry of the line, as distinguished from skirmishers or light infantry, fought in a formation three ranks deep, with the first two ranks firing and the third rank reloading muskets for the other two.

Artillery was emplaced on the line in the interval between infantry battalions. The role of the artillery was to smash the hostile guns and

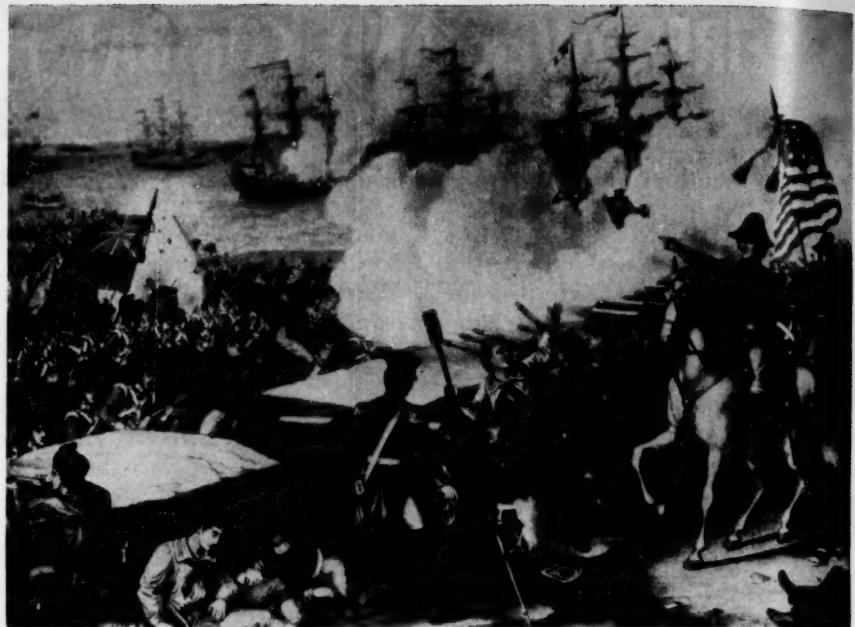


Brown Bros.



then break up his infantry formations with canister or grapeshot so that friendly infantry could launch a bayonet attack and drive the enemy from the field. The cavalry performed reconnaissance missions, screened the flanks and exploited the success of the infantry once the enemy commenced to retreat. The ratio of artillery to infantry in the French Army increased from one gun per thousand infantrymen in 1796 to six guns per thousand in 1812. This increased reliance upon artillery was made possible by the existence, even then, of a very fine road net in Western Europe. But while it reflected an increased appreciation of the importance of firepower, it also reflected a decline in the quality of the French infantry.

Our own infantry drill regulations published in 1814 were based upon European experiences and were carried forward into the American Civil War. In 1861 we find the infantry attempting to fight in the same dense formations that had been used 50 years before. However, rifled muskets had increased the effective range of weapons in the hands of the infantry from 150 yards to 300 yards. The range of the artillery had increased also, and commanders began to locate their guns on high ground where they could conduct fire over the heads of their own troops and pound the opposing lines. This was fortunate for the artillerymen since, when the attempt was made to put guns actually on the line with the infantry, the gunners became priority targets for every opposing sharpshooter. The division was a part of the organization of both the Union and Confederate Armies; however, the term did not mean the same as it does today. The division was composed entirely of infantry or cavalry; artillery was attached, if at all, only immediately prior to an engagement. As in Napoleon's day, the corps was still the basic unit of combined arms and consisted normally of three infantry divisions, a cavalry division, and an artillery brigade. A typical corps of the Union Army at the battle of Gettysburg—July 3, 1863, contained 775 officers and 14,000 enlisted. Of this number approximately 10,000 were infantrymen, 2,500 cavalrymen and most of the remainder were artillerymen manning 36 field guns.



1815: Artillery a component of the line

The strengths of these organizations were not fixed. The infantry division consisted of three or four infantry brigades, each of which contained four or more infantry regiments. The infantry regiment had a table of organization with a strength of 30 officers and 800 enlisted men, and was divided into eight rifle companies. However, there being no replacement system as we know it today, it was customary during campaigns, as losses mounted, to reorganize the regiments with fewer and fewer rifle companies so that we find record of infantry regiments with only three companies and a total strength of less than 250 men on their rolls.

Field artillery brigades were composed of four to eight batteries of six guns each, equipped with 3-inch or 12-pounder rifled cannon. Although smooth bore cannon were in use throughout the war, most of them were replaced in the Northern armies by 1865. Although the effective range of the artillery had risen from 400 yards in 1814 to 2,500 yards in 1865, there were no indirect fire techniques except for heavy siege artillery; it was customary to hold large quantities of artillery in reserve to be thrown into a fight at the critical time and place. However, on the third day of the battle of Gettysburg over half of the reserve artillery of the Union Army had to be held out of action; there simply was

not room for it to go into position. In 1864 when Grant's campaign against Richmond began, the condition of the roads caused that commander to make a decision to return almost a third of his artillery to Washington. It was impossible to bring it up into combat. At this time the ratio of artillery to infantry in the Union field army fell to one gun per thousand rifles. In spite of this decrease in the quantity of artillery, the effectiveness of the rifled cannon was beginning to be felt. Firing blunt, 3-inch shells which looked very much like modern beer cans, they could reach far out beyond the 500-yard range of grapeshot and canister to tear apart the dense lines of attacking infantry. However, these shells had little effect on earthworks. The defenders now were digging in whenever they got the opportunity: they took up positions behind rail fences and stone walls, or if time was available, dug elaborate trench systems. Formations began to spread out. For the first time, the firing line ceased to be the three ranks of the Napoleonic War and became two ranks.

The years that followed the Civil War saw few changes in American organization for battle. Weapons were being improved and new weapons developed, but their significance appeared to be lost upon our military planners. In the Spanish-American War, the excellent Mauser

rifle in the hands of the Spanish infantry was an unpleasant surprise. There were a few machine-guns used, but these were on the Spanish side and like our own Gatling guns were employed like artillery. We still had no fixed division organization, and in 1908 were still debating whether the ratio of artillery to infantry should be three or three-and-a-half guns per 1,000 rifles. By 1913, U. S. observers of the Greco-Turkish war reported with pleasure that infantry armed with "magazine rifles" could stand their ground against a cavalry charge and also noted that the way to destroy an enemy machine-gun was "to concentrate the fire of 15 or 16 riflemen against it." (The U. S. drill regulations of that year prescribed that the firing line should be formed two ranks deep, and that the rear rank man should lean slightly forward when firing in the offhand position in order not to interfere with or deafen the front rank man, sic!) These regulations also prescribed that in the assault, an interval of 25 to 50 yards should be maintained between battalions as long as possible; further recommending that from a sixth to a third of any force should be held in reserve to be pushed forward into the firing line when the time for the assault appeared to be at hand. In spite of the intermingling of units, it was apparently considered that this "human sea" attack would surge forward to overwhelm the enemy position.

It was recognized at this time, however, that with the increased effectiveness of light artillery, the problem of getting these infantry supports and reserves forward was likely to be a difficult one. The manuals prescribed that whenever possible, troops should be moved forward in thin columns until they

could actually be committed into the firing line for the assault; however, it was still felt that success demanded that the frontage for assault battalions be extremely narrow. When subordinate commanders during maneuvers in Texas in 1913 made the final assault with battalions widely deployed, a division commander writing in the *Infantry Journal* declared that such formations shocked the well read and the unread alike and that not even American troops could be expected to push home an attack with so thin a formation!

Apparently this was not solely an American misconception of the effect of the rifle, machine-gun and modern artillery upon the battlefield. World War I began the following August with formations and tactics almost identical to those of the Franco-Prussian War of 1870. The only concession to modern firepower appeared to be the requirement for platoon rushes in advancing the firing line. Whatever the higher ranking officers might have thought, the junior officers and their men wasted no time in accustoming themselves to new conditions. To stay above ground was to die. Germans and Allies alike dug in from the Alps to the North Sea. The front was stabilized, and a frantic scramble began to rewrite the field manuals and the tables of organization! The armies of the world were unprepared to use or to defend themselves adequately against the new weapons of war.

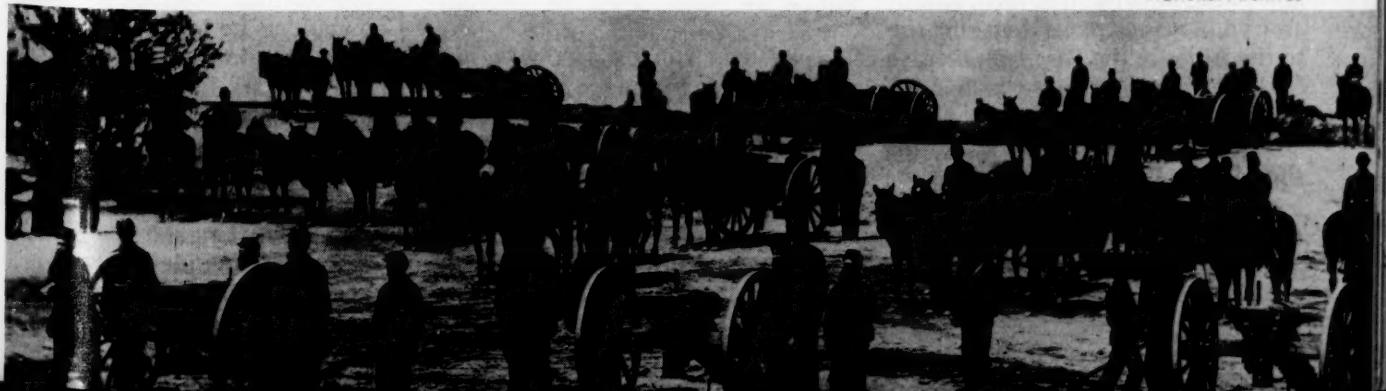
Yet, actually, there were no new weapons upon the field in 1914; the high powered rifle, the machine-gun, and artillery capable of comparatively long-range, indirect fire had been known for fifteen years. The renowned French 75mm gun had

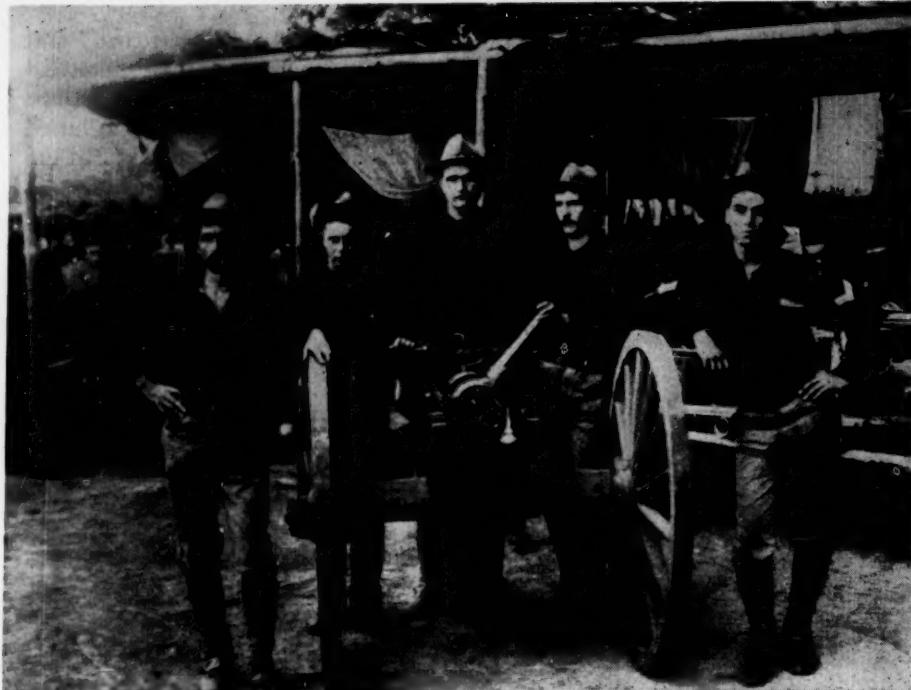
been matched by the German 77 and Russian 76; yet neither side had really evaluated the effect of these weapons. Both sides had even failed to provide the rifleman with an entrenching tool, in spite of the fact that he had demonstrated repeatedly that he was going to dig in if he had to do it with his finger nails. Machine-guns and barbed wire held the front with a steel chain. There were armored cars and there were tractors, but no one thought to combine them into the tank.

In an effort to break this deadlock, the armies began to increase the ratio of artillery to infantry. Divisions were fixed organizations now, and the number of batteries in the artillery brigade began to multiply. Yet certain inadequacies already began to appear. In 1915, following the attack on Vimy Ridge, a French captain named André Laffargue wrote an article complaining bitterly about the inability of the artillery to knock out two machine-gun nests which had held up his company for two days. Communications not being of the best, the artillery placed its reliance upon OPs rather than our present system of forward observers. All too often they just couldn't see the target. While the infantry-accompanying gun had been used, it was generally so quickly picked up by the enemy that its effectiveness as well as its crew were very short lived. Laffargue argued for the addition of some type of mortar to the rifle battalion, a weapon light enough in weight and sufficiently small in size to enable it to be carried forward and concealed immediately in rear of the attacking infantry. The crews of these mortars presumably would be able to see the targets which were delaying the rifle companies and to bring direct fire

The rifled cannon meant increased range and effective overhead fire

National Archives





Grandfather of automatic weapons: misused as artillery

upon them. Laflargue had another idea. He proposed that each rifle platoon should include two small groups, each equipped with a machine-gun. The weapon had to be lighter and more easily handled than the then existing types. These groups, preceding the main body of the platoon, would creep forward into the enemy lines and then open fire upon the flank or rear of the enemy defensive positions. The Laffargue article was read with some interest by the British and French commanders, but a copy of it was captured and shown to Germany's General Ludendorf. That officer immediately declared that the basic ideas contained therein should be incorporated into the revisions to the German field manuals. Furthermore, he directed the development of a light machine-gun and a considerable increase in the number of trench mortars then being issued to the German infantry for the first time. Lastly, infiltration tactics were developed based upon the new light machine-gun. This new weapon, and the tactics built around it, was a tremendous surprise to the Allies in the German offensive of 1918—an offensive which came perilously close to victory.

The AEF of 1917-1918, including the Marine Brigade as a part of the Second Division, was organized in accordance with the latest European thinking, the "square" concept: four squads per platoon, four platoons

per battalion, four battalions per regiment and usually four infantry regiments in the division. Rifle battalions were exactly that; machine-guns, the 37mm howitzer, and the 3-inch Stokes trench mortar were usually contained in separate battalions and were attached to the rifle battalion as necessary. With this organization, half of every unit was normally in support or reserve—recognition of the heavy casualties to be expected in the assault. The field manuals prescribed the battalion attacking in a great rectangle some 300 to 400 yards in width and as much as 1,000 yards in depth. The front line consisted of eight squads deployed as skirmishers and preceded by their scouts; behind this line marched the supports in squad columns and platoon columns. The battalion commander moved approximately in the center on a line with the leading elements of his reserve company. He was expected to be able to communicate with his company commanders by runner or arm-and-hand signal.

By the end of the war, the division had become a permanent organization in the U. S. forces. New tables of organization issued in 1920 retained the square organization for the infantry, but added to the battalion a weapons company containing three machine-gun platoons and a howitzer platoon. The latter con-



Machine gun

sisted of a mortar section with two 3-inch mortars and a howitzer section armed with two 37mm howitzers. The divisional artillery brigade was composed of a gun regiment and a howitzer regiment. The former consisted of three battalions with two batteries each, equipped with 75mm guns. The howitzer regiment contained three battalions of 155mm howitzers (a total of 24 75mm guns and 24 155mm howitzers). Tanks were retained in separate battalions to be attached to divisions as required. Corps artillery consisting of 155mm howitzers and 155mm guns was provided for in the tables of organization, as was General Reserve Artillery to consist of additional 75mm gun regiments as well as additional 155mm howitzer regiments. Commanders no longer talked of the ratio of guns in the artillery to rifles in the infantry but in terms of the number of shells required per square yard of enemy position.

This square organization continued until 1939, then was abandoned in favor of the triangular concept; that is, each unit from platoon to division was to be organized basically into



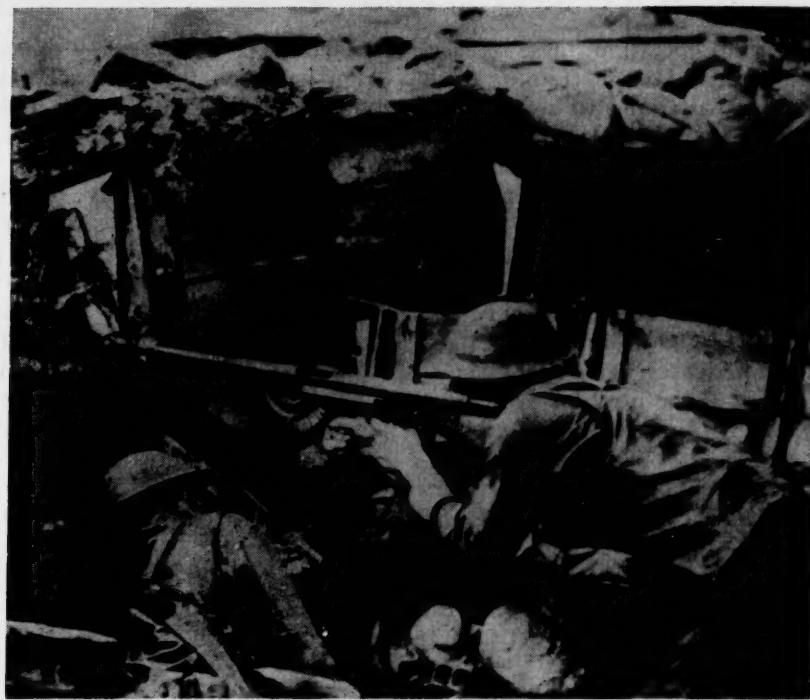
e gungated deployment

three major units, each identical. In theory each of these units should be able to accomplish any one of the following three functions:

- a. To find and fix the enemy.
- b. To fight him, i.e. to maneuver against him.
- c. To finish him, i.e. to function as a reserve.

At the same time, a new German concept of organization called the *Einheit* theory was enthusiastically adopted. According to this concept, each unit was to contain *organically* the weapons required to provide the flat trajectory and high angle supporting or other fires normally required within the zone of action commonly assigned to that unit.

The rifle company received the light machine-gun and the 60mm mortar. The battalion retained a strength of between 800 and 1,000 men as it had for over 100 years, but now the number of riflemen in it were greatly reduced. In addition to the men necessary to man the supporting mortars and machine-guns, there was an increased need for truck drivers necessary to haul the vast quantities of ammunition which



With barbed wire they locked the front with bands of steel

these weapons employed. In recognition of the fact that the modern battlefields had become a place of emptiness, communications had greatly increased. Telephones and radios in considerable numbers had been added, and a large part of the men in the battalion were now occupied in operating and maintaining this equipment.

When the U. S. entered World War II and began to test this new organization on the field of battle, the basic triangular concept was retained but there was a continual build-up in supporting weapons and services. More artillery was added to the division, more transportation to haul the ammunition, more communications. For the first time, the complaint began that there were too few infantrymen in the division. In the Marine Division, engineers and tanks became organic to the division itself, while naval gunfire and close air support joined the corps artillery in supporting the infantry. By 1944, the Marine Division, reinforced in preparation for an assault landing, numbered nearly 20,000 men. But of this vast number, the riflemen, who had originally composed 80 per cent of the strength of a division, now numbered little more than 15 per cent. In the Army division the percentage of riflemen was even less. The Marine Corps had adopted the 13-man rifle squad organized into three fireteams; this

organization was designed to offset the disruption, incident to the first stages of the amphibious assault, and emphasized small unit leadership. Even the squad leader had the chance to employ the triangular concepts of battle. Perhaps of more importance, it was possible for the squad to retain the bulk of its firepower (contained in its three BARs) even when it had suffered considerable casualties.

This problem of casualties continued to plague the infantry, Marine and Army alike, for in spite of the tremendous firepower provided by the divisional supporting weapons, naval gunfire and air support, the front line companies continued to wither away. No longer were these casualties caused primarily by machine-gun and rifle fire but by high explosive. Artillery superiority proceeds according to a geometric ratio, and the attacker could usually locate and destroy the bulk of the defending artillery before an attack. Locating and destroying the enemy mortars was an entirely different problem. These mortars, together with light machine-guns, were cutting the effective strength of a rifle company in half in the space of a single day's fighting. As a result, Marine divisions entered combat at Iwo Jima and Okinawa with attached replacement battalions containing on the average 1,200 infantrymen. When the opportunity presented itself

prior to an operation, these replacements received some training with the rifle battalions to which they would subsequently be assigned.

In 1947, the Marine Corps, in anticipation of further peace-time cuts in strength, decided to streamline its division organization.

Extensive research was begun on the records of combat both in the Pacific and the European theaters. Our experiences against the Japanese showed the need for even more supporting fires. Of added significance was the likelihood that the relative weakness in enemy artillery and armor, common to our island campaigns, might not hold true in a future war.

A study had also been made of the probable consequences of the tactical employment of atomic weapons against a World War II-type landing. This study indicated the need for a more flexible organization within the division and stressed the necessity for a system by which assault battalions could be replaced *in toto*. Any tendency to solve the problem merely by increasing the size of the division ran directly into the ever-present limitations on amphibious shipping and the road-block of peace-time economy. With respect to the latter restriction, it was realized that unless training was to suffer, the peace-time organization and the war-time organization should be as near identical as possible with the difference only in the number of units activated.

After much thought and experiment, there was produced the tables of organization with which the Marine Corps began its part in the Korean conflict. The new tables were based upon the concept that the Marine division was designed primarily for amphibious operations and should contain *organically* the weapons and equipment normally required in any beachhead operation. To this was to be added the additional supporting arms, tanks, artillery, AA and amtracs, plus motor transport and other services from Force Troops needed to meet the anticipated situation as regards terrain and enemy. In other words, the division, reinforced for combat, was to be a task force tailored for each specific operation. To date, the Korean war has produced no major changes in organization, equipment,

or tactics. One factor in this campaign has been the extremely wide zones of responsibility which it has been necessary to assign to units of the United Nations forces. As a result, many officers have recommended an increase in the number of battalions per regiment or an increase in the number of infantry regiments in the division. This proposal is further strengthened by the nature of the terrain in Korea which is not suited to the most efficient employment of supporting arms and therefore places a greater burden on the infantry than the triangular organization was designed to accept.

against the top limit of the load we can hang on the Marine. A new rifle and a light-weight cartridge might help, but now we are beginning to man protective armor, for the machine-gun is no longer the number one killer on the battlefield; 85 per cent of all U. S. casualties in Korea were produced by fragments from artillery or mortar shells, mines or grenades.

In any case, we would be unwise to use experience in Korea as a basis for change except after the most careful study. The enemy in Korea is still not fully equipped, organized and trained according to modern



Einheit — organically tailored for a task

Another proposal arising from the Korean war has been for still greater fire support for the infantry. This in spite of the fact that the weight of fire support within the Marine division has already increased over World War II standards by 50 per cent in artillery, 100 per cent in mortars, and 75 per cent in tanks. In addition, close air support, in terms of weight of bombs and rockets per mission has increased by nearly 100 per cent. Obviously, we are approaching a limit here in terms of our logistical capabilities.

We long ago ran afoul of certain limitations in the infantry units. The Garand rifle has no greater effective range than the Springfield 03, or for that matter the Krag of 1898, because at ranges beyond 300 yards the average human eye cannot easily detect individual targets on the modern battlefield. If we resort to area fire and give the rifleman an automatic weapon, we come up

standards; enemy air has not been a factor in our ground action; lastly, the Korean war was a mountain operation much like the Italian campaign of World War II. Moreover, in Korea, we have been compelled to operate both offensively and defensively on frontages double those considered acceptable up to this time.

Our ability to accept such frontage is the result of the 75 to 100 per cent increase in supporting fires organic to the division. This situation may also exist if other "brush fire" wars break out. Of even greater significance is the fact that the outbreak of any war in which atomic weapons were used tactically would probably compel us to fight on equally wide fronts. The destructive power of atomic weapons and the difficulty of detecting indications that they are about to be used will compel us to broaden and deepen our normal deployment. A greater

proportion of our force must be kept initially in reserve which means smaller numbers in the front line; however, the front line units must be organized and equipped so as to be capable of self-sustained action for a reasonable period of time.

The present regimental landing team is well suited to independent action. Its capabilities would become even more enhanced by the addition of a fourth battalion to give it greater depth, provide all-around security and sustained infantry striking power in the offensive. Its principle disadvantage is obvious—too many eggs in one basket.

If we build up the present infantry battalion into a task force capable of independent action we have the problem of control—and if we retain our present triangular organization, the result is a division practically double the present size. It is difficult to conceive a battalion task force with less than five rifle

required for each of these elements will vary.

If each regimental headquarters is a tactical command group capable of controlling two to five battalion-size units, then it must contain organically the necessary equipment and personnel for such control. However, those weapons with which the regimental commander will influence the action need not be organic. Therefore, heavy mortars and anti-tank weapons could be in separate battalions to be attached to the regiment as required.

The minimum number of infantry battalions in the division should be that number which would permit all three regimental combat teams to operate independently and for a considerable period of time; in other words, not less than 12 battalions. If we are to keep within the present divisional strength, these battalions must be much smaller than at present. We should accomplish this by reducing the number of personnel



Fire team: embodied the basic triangular concept

companies, plus attached armor, engineers and artillery.

The solution may lie in a modification but not an abandoning of the triangular concept. At division level, the triangular concept is entirely sound. The division commander, of all the various levels of command, is most able to fight his battle by three distinct phases—with three subordinate maneuvering elements to find and fix the enemy, fight him into a situation of weakness and strike him a crushing blow. However, the size and composition

within the battalion, but with a minimum reduction in firepower.

As a start, we could reduce the rifle squad to ten men (the parachute battalions operated efficiently with three-man fireteams at Gavutu, Guadalcanal, Choiseul, and Bougainville). We should speed the development of a better machine-gun for the rifle company MG platoon. If we can't develop one, let's adopt the German MG 1942—it has the range, rate of fire and quick-changeable barrel we need. Eliminate the 60mm mortar—we have enough

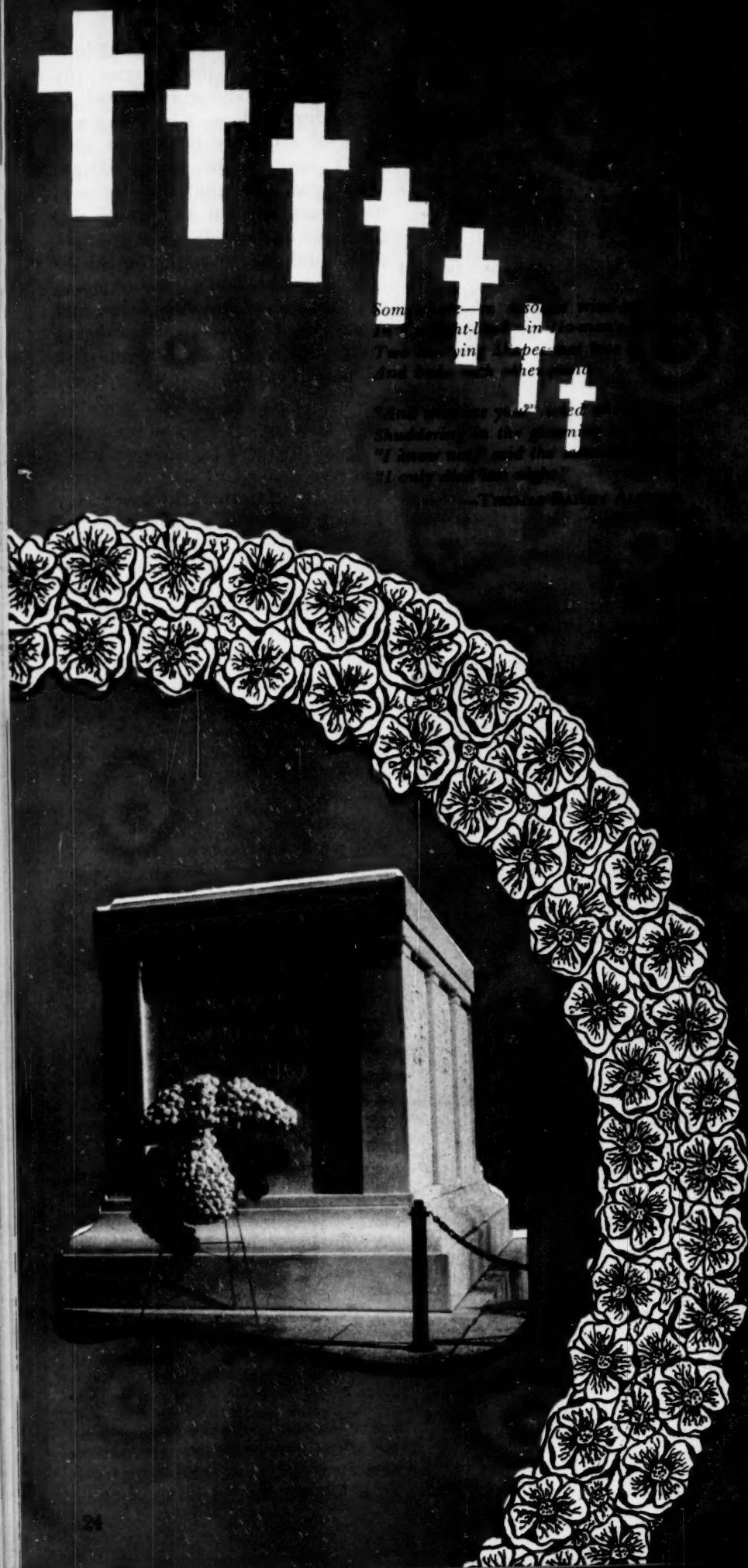
high-angle fire in 81mm and 4.2-inch mortars. Most of the rifle company commander's targets are suited to direct fire, anyhow. Give him a section of recoilless rifles, and they don't have to be 57mm; 37mm would pack sufficient wallop for most targets and would be lighter and easier to conceal. Develop a spigot-type* anti-tank projectile for this 37 and drop the 3.5-inch rocket launcher, at least at this level. We had such a projectile under development in 1946 for the 37mm AT gun then in use.

Let's keep our triangular battalion with three rifle companies but eliminate the weapons company. We can put our platoon of six 81mm mortars in the H&S company along with an anti-tank platoon for four 105mm recoilless guns. Drop the platoon of heavy machine-guns—on the offense the men needed to man these weapons are more economically used on mortars; on the defense, the 18 light guns in the rifle companies plus some AP mines should be able to pin the enemy down long enough to bring artillery and mortar fire on him. Carry the flame thrower in battalion H&S Company as a spare weapon.

Such proposals as those above will undoubtedly bring screams of protest from every commander from squad to battalion; for obviously, all have lost something. However, the regimental commander, with four or more battalions under his control, isn't going to demand as much from the individual battalion as he does at present. If he does, he will have far greater supporting fires to assist that battalion than he had in 1945.

The details of all the changes in infantry battalions and supporting arms and services necessary to achieve this flexibility will require long and careful study, but change we must if we are not to be caught as unprepared for new ways of war as were the armies of 1914. USMC

*From Marine Corps Development Center we learned that this projectile was actually similar to the rifle grenade and launched from the muzzle of the 37. There were two types, an HE, for heavy demolition missions and an HEAT which could penetrate 10.5 inches of armor. It derived its name from the spigot attached to the base of the grenade, which in turn, was inserted into the gun tube.—ED.



Som
ant-l
Two
yin
And
"I
Shudder
"I know
"I only

William F. McDonnell

**Inside the church were four caskets. A sergeant walked in, laid a rose
on one, and an unknown American became a symbol to his country**

been Admiral Dewey's flagship at Manila Bay and had been reconditioned in 1921 especially to transport the body home.

Additional ceremonies in Washington marked the arrival on November 9. There the coffin remained in state for two days until the funeral at Arlington on Armistice Day.

Time for preparation of the tomb for reinterment had been so short



A national hero laid to rest

that its location on the terrace of the amphitheatre had been quickly decided upon. The casket was inclosed in what was designed to be the base of a monument to be erected later. In 1926, Congress authorized the securing of designs for the monument by competition and, after approving the winning design, appropriated additional funds for completion.

The monument is a solid block 16 feet long, nine feet wide and 11 feet high. It weighs about 72 tons. The front panel faces the city of Wash-



Borne on a gun carriage to a final resting place

ington and the Potomac River, and is adorned with a composition of three symbolic figures commemorative of the spirit of the Allies in World War I: VICTORY through VALOR attaining PEACE. On the rear panel of the monument, constructed of Colorado marble, is the inscription, "Here Rests In Honored Glory an American Soldier Known But to God."

Arlington had been a national cemetery for over 57 years when the Unknown Soldier was buried on the grounds of what had been the estate of the family of Mrs. Robert E. Lee. On May 13, 1864, Quartermaster General Montgomery C. Meigs ordered burial of about a score of Federal soldiers in the terrace which then bordered the garden in the rear of the mansion. During the following month Secretary of War Edwin M. Stanton ordered 200 acres of the estate, including the mansion, set aside as a military cemetery for burial of soldiers dying in hospitals

in the Washington, D. C. area.

Still later, General John A. Logan, first commander-in-chief of the newly organized Grand Army of the Republic, established Decoration Day and exhorted the veterans and bereaved of the United States to "decorate the graves of the fallen citizen soldiery" on May 30, 1868. When the day was made a national holiday in later years, the official name of Memorial Day was designated.

At the cemetery now, there is a perpetual guard of honor taken from A Co, 1st Bn, 3d Inf Regt at Fort Myer, Virginia. Each sentry is on duty for two hours, walking the 30 paces of his post at the tomb.

Of those who visit the Washington area to view the monuments and buildings attesting to the greatness of America, most make the trip to Arlington. There, they may pause and reflect and pay their respects to their unknown countryman who is enshrined as the symbol of a nation's sacrifices for freedom.

US MC



Final volley for the unknown ▶

KOREA AWARDS



Italics denote posthumous award.

Navy Cross

1stLt William C. Britt, *Capt Ralph L. Waltz.*

Silver Star

Col Wilbert S. Brown, *2dLt Byron H. Chase*, Pfc Louis C. Faretra, 1stLt Rayman G. Heiple, SSgt Miller W. Scott, *1stLt Leslie T. Shelton, Jr.*, Pfc Charles F. Smith, Jr., Pfc Albert J. St. Clair, Cpl Estle A. Patton, Pfc Raymond L. Wilder, SSgt Hubert A. Williams, 1stLt George M. Wilson, Cpl Charles F. Wintrow, *1stLt George W. Yates.*

Legion of Merit

Col Harry N. Shea, Col August L. Vogt.

Distinguished Flying Cross

Maj Elmer A. Anderson, Jr., Capt Joseph F. Benson, Capt Clive Blaney, Capt Owen W. Brainard, Capt Alfred F. Branham (2d) George R. Brier, Capt Bobby D. Camp, Capt Jack W. Campbell, Capt James R. Carmichael, Capt William B. Clem, Capt George J. Collins (2d), Capt Henry W. Covington, Jr., Capt Stanley G. Dunwiddie, Jr., Capt Thomas R. Egan, Capt Clifford E. Fauchier, Capt Ralph W. Gause, Capt Daniel P. Gillon, Jr. (3d), 1stLt Dale C. Gough, Capt Thomas A. Gribbin, II (3d), Capt Hubert C. Grow, Capt Harold W. Hawkins, 1stLt Lawrence R. Hawkins, 1stLt Robert E. Howard, Jr., Maj John A. Hood.

Capt Allen H. Howes, Captain James O. Hunt, Capt Curtis E. Knudson, 2dLt Joseph R. Kotchick, 2dLt William G. Langley, Capt Lenhrew E. Lovette (2d), Capt Charles H. Ludden, WO William G. Lundy, Capt Warren J. Manninger (3d), Capt George A. Meisenhelter, 1stLt William R. Miller, Maj Jack W. Milt (2d), Capt Roy J. Molick, Capt Daniel G. Murray, 2dLt Charles C. Newmark, Capt Robert "G" Odom, Capt Alfred C. Palfrey (2d), Capt Willard L. Palmer, Capt Charles J. Pavlich, Jr., Capt James I. Perry, TSgt Thomas C. Rafferty, Capt Robert F. Renner, Maj William W. Rogers, Jr.

Maj John J. Rollins (3d), Maj Ray D. Rushlow, Maj. Edward L. Schnettler, Capt Leonard Schoenberger, Maj Charles Schroeder, Maj Dave E. Severance, Capt Floyd Smith, Capt Kenneth J. Smock, Capt John N. Snapper (3d), 1stLt Richard T. Spencer, Maj Walter E. Sullivan, Capt Francis C. Tanner, Capt Harvey A. Toft, Capt Thomas B. Wadsworth (2d), Capt Chester T. Walters, 1stLt David Y. Westling, Capt Hugh B. Wilhoite, Jr. (2d), Capt Richard H. Vollick, Capt Merco J. Verrant, Capt Jack R. Vetter, Capt Richard T. Ward (2d).

Navy and Marine Corps Medal

Sgt Fred Kiehn, Jr., Pfc Clarence E. Washburn, MSgt John J. Wilcox.

Bronze Star

Maj William H. Anderson, Sgt Ronald A. Appleget, Cpl Robert F. Azbelle, Sgt Charles R. Beckmeyer, WO Jesse G. Baker, 2dLt Robert M. Baxter, Pfc Franklin D. Belcher, Pfc Theodore Boersom, 2dLt Lee R. Bowmaker, Capt Lyle W. Bullard, Maj Joseph S. Buntin, Maj George W. Carrington, Jr., Cpl John T. Coughlin, Pfc Harry Cowle, LtCol Thomas J. Cross (2d), Capt Samuel A. Cox, Jr., TSgt George A. Craft, Sgt Eddie G. Cunningham, Capt Howard P. Done, Maj Joseph F. Donahoe, Jr., Capt Lawrence R. Dorsa, LtCol Leo J. Dulacki.

Cpl Donald R. Fahrenholz, Sgt Anthony A. Figueiroa, SSgt James S. Forcier, 2dLt Jay C. Frost, 2dLt Joseph P. Gagliardo, Maj Alexander Gagyi (2d), LtCol Andrew C. Geer (2d), SSgt Bruce R. Goldson, 1stLt George W. Greenlee, 2dLt Robert A. Haydock, 1stLt Ross J. Heikes, Maj Vernon L. Hendley, Pfc Robert F. Herber, Maj Theodore P. Hopkins, Maj Eric S. Holgrain, Pfc Robert T. Hudson.

Pfc Robert T. Hudson, 1stLt Herschel B. Jones, Pfc Walter Jones, Jr., 1stLt Bernard A. Kaasmann, Maj Lynn "N" Kelso, Capt Marvin Kristan, Pfc Carl B. Lang, Cpl David E. Lichtfeld, MSgt Edwin L. Paderick, Maj Paul L. Pankhurst, 1stLt Bennett H. Perry, Jr., TSgt Freeman Porterfield, SSgt Raymond R. Railsback, SSgt Richard E. Rainbolt, SSgt "J" "C" Rappe, TSgt William E. Rappold, Cpl Joseph G. Reading, Maj Herbert C. Reed, Pfc William E. Reese, LtCol Henry H. Reichner, Jr., Maj Leo W. Reigel, SSgt Ronald P. Render, 1stLt Robert G. Riddle.

Maj Glenn L. Rieder, Capt Theophil P. Riegert, LtCol William M. Ritchev, 1stLt Presley M. Rixey, Col William D. Robertson, LtCol Arthur N. B. Robertson, Pfc Malcolm H. Roberts, Cpl Lahymann F. Robinson, Capt Glenn W. Rodney, Pfc John H. Rossow, MSgt Clayton T. Rundle, 1stLt Taft B. Russell, Sgt Joseph J. Ryan, *Sgt Howard T. Ryan*, Cpl Harold A. Saltzman, Cpl Edward M. Sager, Pfc Walter S. Sanford, Cpl Earl J. Sarradet, WO Floyd D. Schaeffer, Cpl Gary L. Schemmel, Capt Edwin S. Schick, Sgt Paul G. Schick, Capt James R. Schoen, Cpl Leroy F. Schuster.

Pfc Harley G. Schwartz, Maj Paul C. Scofield, Sgt James A. Shaffer, Capt Charles M. See, Capt Ray W. Settle, LtCol Robert D. Shaffer, SSgt Daniel A. Shannon, TSgt Elmer G. Shaw, Capt James M. Sherwood, Maj Frank A. Shook, Jr., 1stLt John D. Shoup, 1stLt Paul L. Siegmund, Pfc James Simon, Pfc Walter Sliva, Cpl Charles H. Sommers, 1stLt Sidney E. Speed, Maj Richard C. Smith, Maj Littlejohn K. Smith, 1stLt Albert C. Smith, Sgt Don G. Smith, 1stLt Windsor R. Smith, Jr., LtCol Louis R. Smunk.

Sgt David A. Snyder, Cpl Joseph S. Stachowski, SSgt Robert S. Steigerwald, 1stLt Richard W. Stone, 2dLt Thomas T. Storer, Sgt Peter J. Succar, 1stLt Richard J. Tarrant, Jr., Cpl Thomas F. Taylor, Pfc King H. Thomas, 2dLt Crawford Thompson, 2dLt Alexander B. Throwbridge, Maj Alfred A. Tillmann, Maj George W. Torbert, Pfc Pablo Torres, 1stLt Thomas D. R. Turley, Pfc William D. Turpin, Cpl Melvin J. Madsen, Pfc George E. Maloney, Pfc Richard P. Mann, Cpl George A. Manos, Sgt Reuben H. Massey, Jr., SSgt Carl E. Martin, Pfc Willard L. Mayfield, Sgt Raynal J. Mayman.

LtCol Robert E. McCook, Pfc Wesley L. McCrum, Pfc John E. McDermott, Maj James C. McFerran III, Pfc Alfred McIntosh, Jr., 2dLt William V. McLaughlin, TSgt Thomas A. McClean, Pfc Walter K. McMorrow, SSgt George L. McNeil, 1stLt Philip R. Meade, Sgt Jess E. Meado, Cpl Jack J. Meehan, Pfc Billy F. Melvin, Capt Edward A. Miller, Cpl John F. Minden, Maj Roy E. Moffett, Maj Robert T. Moore, Jr., Cpl June Morita, 1stLt Roddey B. Moss.

Cpl Joseph Vacca, SSgt Joseph A. Vaccaro, Cpl John H. Valliquette, Jr., TSgt Lloyd H. Van Antwerp, Pfc Francis L. Van Etten, 2dLt Richard H. Vaught, Maj Robert H. Venn, LtCol Joseph F. Wagner, Jr., Cpl Wilmer C. Waldrop, Capt William T. Walker, LtCol Joe L. Warren, 1stLt Vincent J. Walsh, Col Lewis W. Walt, 2dLt Richard A. Waszak, Capt Leo G. Wears, Pvt Gerald D. Webb, 1stLt Charles F. Weeden, 2dLt Robert E. Werckle, 1stLt Paul H. Westenberger, SSgt James E. Wetmore, Capt Robert Whalen, LtCol William H. Whitaker.

1stLt Cyrus N. White, Jr., Capt Roy B. Whitlock, 1stLt Robert L. Whitney, Pfc Raymond L. Wilder, Maj Walter L. Williams 2dLt Raymond L. Wilson, Jr., 2dLt Walter K. Wilson III, Pfc Michael R. Zaborowski, Capt Robert F. Young, Jr., Sgt Emil Zerr, Jr.



Trained for Support

**In the air or on the ground, Marines have a common
background to aid each other in a common purpose . . .**



SINCE THE DAY LIEUTENANT Alfred Cunningham soloed 42 years ago to become the first Marine representative in naval aviation, many exploits of successful combat actions have been recorded in the annals of Marine Corps Aviation. Never forgotten names such as Guadalcanal, Bougainville, Rabaul, Iwo Jima and Okinawa in WWII, and Chosin and Hungnam in the Korean war, bear out how successful these combat actions have been.

Just what was behind those successful combat exploits? What made them possible? The natural and correct answer is—many things: equipment that was able to do the job, esprit, Naval logistical support, organization, training and others. But in the final analysis, *training* is the most important. Not just training of pilots to fly the aircraft, but of a host of other equally valuable and necessary men in the aviation organization. To understand fully the functioning and employment of Marine Aviation therefore, an appreciation is needed of the complex, continuous, large and increasing training effort required to sustain it.

The initial premise under which this training is executed, holds that the success of a battle effort and the saving of many lives can hinge upon the action of just one Marine. If a bomb does not drop when the pilot triggers the release, if he misjudges and wastes his bomb, or if extra aircraft are grounded because of poor

maintenance, the cost may be measured in the blood of our own troops and the security of our country. Therefore, primary emphasis is placed upon the instruction and training of the individual officer and man.

For the purpose of simplification, the training of Marine Corps personnel may be covered broadly under four main headings:

(1) Pilot training.

(2) Technical aviation training—i.e., ground crews, and all technical skills which are peculiar to aviation.

(3) Professional training of aviation officers to fit them for duty in staff and command capacities in the Fleet Marine Forces.

(4) Basic training of enlisted personnel.

Initially all Marine flyers are a product of the Naval Air Training Command. There, they have been versed in the fundamentals of flying and designated as Naval Aviators. Men from enlisted ranks who have completed flight training are designated Naval Aviation Pilots. When graduated from flight training each new pilot is ordered to an aircraft squadron for accelerated operational training, with emphasis on all phases of aviation necessary to support the Fleet Marine Forces in combat. This first tour of duty for the fledgling flyer embarks him on an active career of continuous learning.

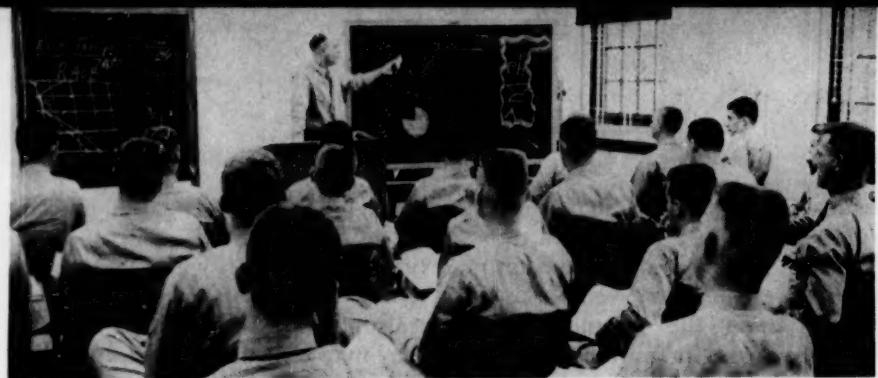
All Marine aviation squadrons,

when not actually engaged in combat or in support of combat operations, are preparing for that eventuality by constant repetition of training cycles, covering all the tasks they may be called upon to perform. These programs are appropriate to the type of aircraft assigned the squadron: fighter, attack transport, helicopter or other. The best training area for a pilot is the wide open sky, and Marine aviation organizations key their efforts in that direction—"Get 'em airborne!" When the need arises, as it did during the Korean crisis, certain training squadrons also are organized to maintain adequate flow of qualified pilots to tactical units. This includes a re-orientation program intended to familiarize pilots with new types of aircraft.

In a Marine air wing there are many jobs that don't call for shooting down enemy planes or harassing enemy troops. However, the people who fill these spots also serve as reliefs and replacements for those actively engaged in combat operations. In order to provide the desired degree of tactical squadron experience to all aviators, rotation of flying personnel between combat squadrons and the many necessary supporting billets is coordinated with the cycles of squadron training. Exercises with ground and naval forces periodically punctuate the employment schedule. The operating base for these exercises may be an aircraft carrier, an

By LtCol R. P. Keller





Adequate flow of qualified pilots

airfield set up to approximate "in the field" conditions, or even, upon happy occasion for the family man, the squadron's home field. Ground school is held frequently on a multitude of important subjects. The squadron commander, up to his ears readying a unit for combat or forward deployment, always feels that there aren't enough hours in a day to accomplish all that his squadron has scheduled. Still the job gets done! And it is only through this intense application on the part of all squadrons and their maintenance, service and supporting aviation organizations, that the training mission can be accomplished.

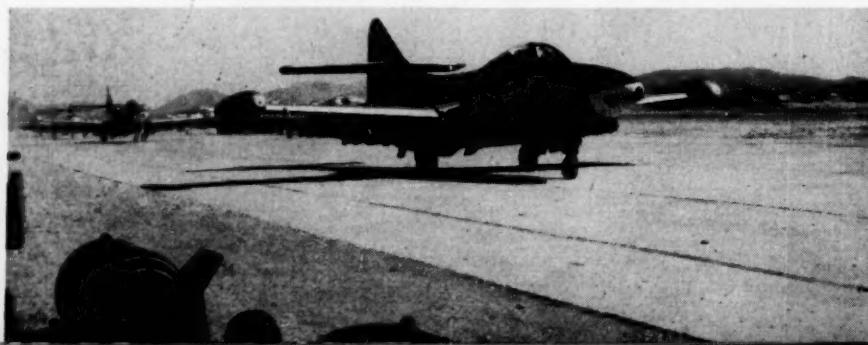
Where do the hard-working, skillful, and vitally-important aircraft mechanics, metalsmiths, parachute riggers, electricians, hydraulicsmen, ordnancemen, tower operators, crash-crewmens and the many other technically qualified personnel come from? There are a number of sources ranging from apprenticeship and "on-the-job" training to formal instruction in a technical school. For many years apprentice training has helped the beginner to get well started in a specialty, and "on-the-job" training has helped the partially qualified to become more skilled. Also, specialist training is offered in many courses organized and operated by combat and supporting aviation units. These methods will continue to play an important part in the Marine Aviation training program. Obviously, how-

ever, they have not been the whole answer to the constant need and increasing demand for special skills, and for people with the broader qualifications of supervisory personnel.

Until recently, the post-World War II technical training program was carried out in significant measure at the Marine Corps Aviation Technical School at Quantico, Va. However, that school was disbanded as of 30 April 1953 in the interests of economy and the larger, older Naval Air Technical Training Command has been utilized to an increased degree. With headquarters at Memphis, Tenn., the NATTC has multitudinous training units geographically located to best serve each individual training mission. Courses of instruction vary from weeks to months in length and, in June of 1953, the Marine student load undergoing instruction in the NATTC was over 4,000 officers and men. Of course, the Marine Corps supplies officers and men to the naval air technical training staff to assist in processing the work load imposed by Marine students, just as is done in the pilot training activities of the Naval Air Training Command.

Thus, from these sources come people who, in large measure, must discharge vital responsibility for maintaining the technical readiness of Marine aviation to permit its full employment in support of the ground forces of the FMF.

"Get 'em airborne!"



In normal circumstances all Marine officers, whatever the source of their procurement, are trained at the Basic School, Quantico. While in training there, or at other times, depending upon the current conditions and requirements, those who desire to enter Marine Aviation may apply for flight training. In emergency periods the policy that all Marine officers will be Basic School-trained cannot be followed invariably. However, every effort is expended at the conclusion of an emergency, such as following World War II, to send to the Basic School as many as possible of all officers who missed the training in its normal sequence. Thus, the Marine Corps attempts to initiate the bulk of its officer personnel into service with a common background of training, friendship and mutual purpose. This tends to bond together the air and ground organizations into an extremely close-knit striking force with reciprocal confidence of all elements, each with the other.

The later formal professional training of aviation officers is centered in the Marine Corps Educational Center at the Marine Corps Schools, Quantico. This educational center has both a senior course for colonels and lieutenant colonels, and a junior course for majors and captains. Classes in each course are usually nine months in duration, but may be shortened during periods of emergency. A very considerable measure of mutual appreciation of their respective problems, needs and capabilities is achieved by air and ground officers in day-to-day personal contact in these classes. Student staff assignments are made with little regard to the primary military occupational specialty of the officers involved. For example, an aviation officer may be appointed as operations officer for a division in an amphibious attack problem in which he is responsible for the employment of division troops and the efficient use of supporting arms. The staff air officer might be a non-aviator. Often-times "the shoe is on the other foot," and usually it fits pretty well! While the size and composition of individual classes vary from time to time, the senior course (over the long haul) has averaged some 30 percent aviation officers in its student body, and the junior course 40 percent. The

junior syllabus is based on battalion and regimental operations, and the senior on division and corps level. Out of these classes, and from the experienced instructor staff, come many of the new concepts for future amphibious warfare, jointly conceived and developed by ground and air officers.

There is additionally at Quantico, a school for communications officers in which the representation of Marine aviation approximates 20 percent. Here, the communication procedures and equipment that form, in part, the means through which command of a military organization is exercised, are thoroughly studied by officer students. Breakdowns in communications both in the air and on

initial indoctrination and training as a Marine are given. Continuous and more advanced basic training is provided subsequently in the units to which Marines are assigned. For aviation personnel, this background of basic infantry training is just as important as for members of ground units. Non-flying enlisted men in aviation units must know how to get along under field and combat conditions. The combat security of more than one airfield has been achieved by clerks, mechanics, cooks and others who kept the squadrons operating and planes flying by working in their assigned fields 12 hours a day, after which they manned machine-gun and rifle positions in an airfield ground de-

which is not specifically necessary to the flying and fighting of aircraft. Reference has also been made to the training of other than flight personnel. That is because Marine Corps training is an integrated whole, just as its combat arms are an integrated team, and strict delineations cannot always be made. This reflects the Marine Corps' belief that each component must know enough of the others' needs, duties and capabilities, to ensure the successful functioning of the whole during the rigors of combat.

It must go on record, also, that Marine Aviation benefits immeasurably by the attendance of representative personnel at many other schools operated by the Army, Navy and Air Force. That is an entire story in itself, however. Reciprocally, personnel of other services are offered the facilities of certain Marine Corps schools and the net effect is to the greater good of the United States Armed Forces.

Any article on Marine Aviation training must mention, at least in passing, the correspondence courses offered by the Marine Corps Schools Extension School at Quantico. A series of courses are available, to be undertaken voluntarily, which are designed to assist officers and men, regular and reserve, aviation and ground, in professional improvement. Many enlisted men have been helped in making the jump to commissioned rank through the training they have provided themselves on their own time by completion of various correspondence courses. It is not surprising that in time of emergency, individuals rediscover the fact that their own professional competence has a direct bearing upon the security of their country and their own survival in battle. This is a fact of which the Marine Corps tries to be keenly aware at all times.

The system of schools, training courses, procedures and subjects undergo a constant evolutionary and developmental process. Many years of study, experience and combat have resulted in the present configuration of the Marine Aviation training complex. It is not perfect but it is good, and it will get even better. That's how Marine Aviation "gets that way."

USMC



Increasing demand for special skills

the ground during battle may cost lives. Therefore, this also is a very important part in officer training.

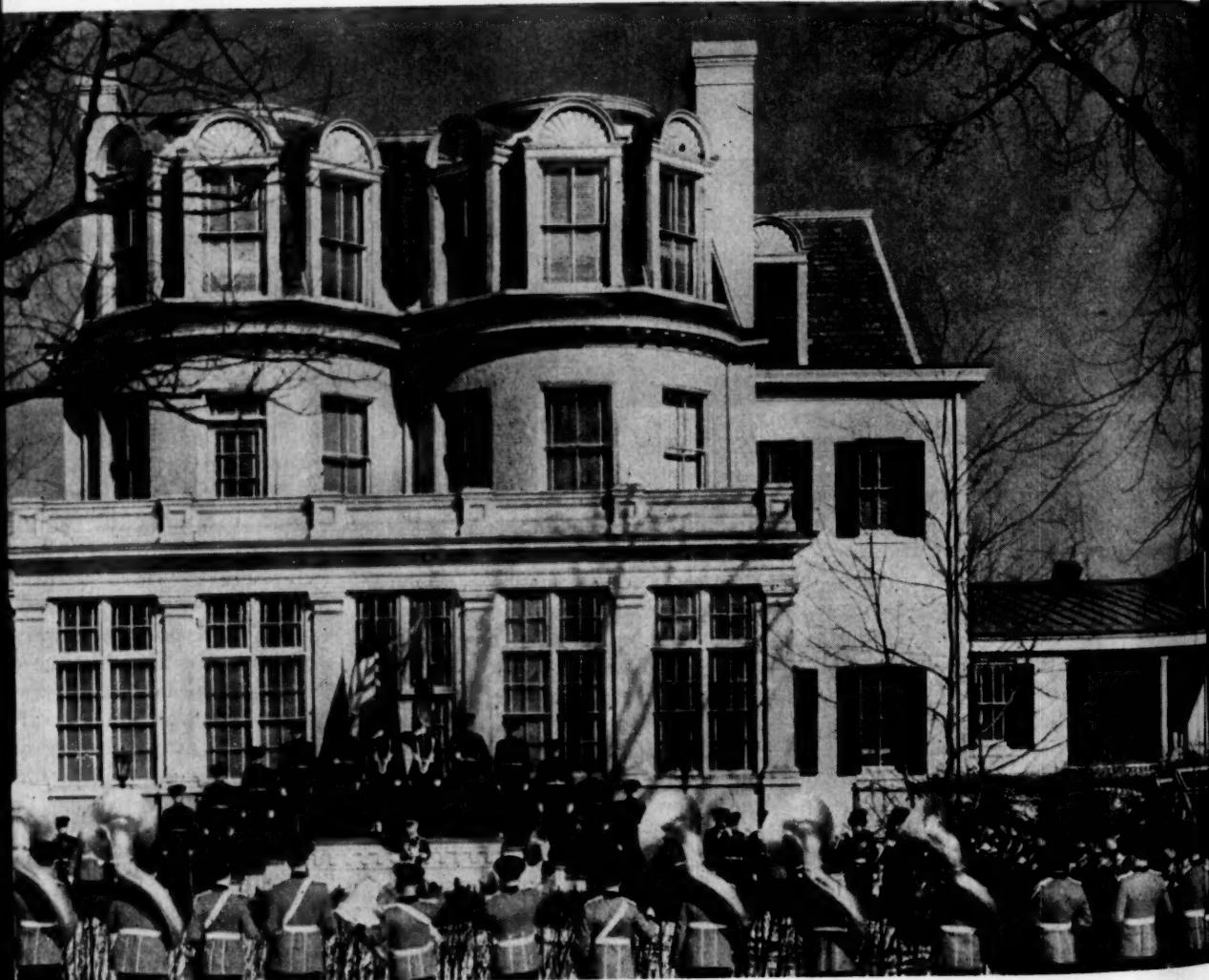
Not all professional training of officers is the formal type. In normal times considerable and important emphasis is placed upon the taking and passing of professional examinations as a pre-requisite for promotion. In order to meet successfully these challenges, months of study on his own time are required of the individual officer. For all practical purposes, these examinations differ little between aviation and ground officers. Preparatory study is guided by a list of subjects and references published by the Commandant of the Marine Corps. This is another important factor in the maintenance of the "Marine first, specialist second" concept.

Basic training starts for all enlisted personnel in "boot camp" immediately after enlistment. There,

fense system another eight hours. It is comforting and important to have the know-how for such short-term emergency requirements. This basic training program has behind it also one of the best of all personal incentives—increased rank and pay. General military subjects tests for each rank from corporal to master sergeant must be passed in order to qualify for promotion. Basic training given in aviation units to aviation personnel directly aids them in preparing for the "GMST" by covering a wide variety of military subjects such as first aid, field sanitation, defense against chemical attack, etc. Of course, knowledge in a given technical field commensurate to the duties of higher rank is a requirement for promotion as well.

To cover aviation training in the Marine Corps even briefly, it has been necessary to point out certain training given aviation personnel

The Commandant's House



The house on "G" street has withstood war and weather
to become the oldest landmark in Marine Corps history

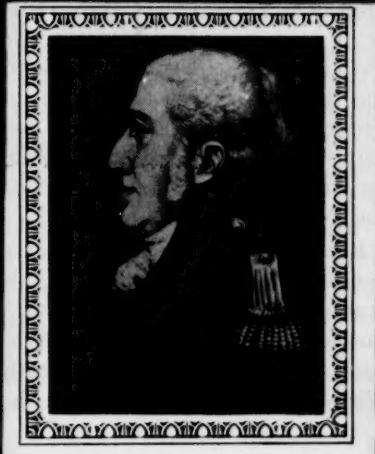
ALONG THE NORTH SIDE OF THE Marine Barracks Quadrangle, on "G" Street between 8th and 9th, in the Southeast Section of the District of Columbia, stands what is probably the oldest public building in continuous use in the Nation's Capital. It is the Commandant's house, official residence of 18 of the 20 Commandants who have headed the U. S. Marine Corps during its 178-year history.

When Archibald Henderson, the third Commandant to live in the house, died at the age of 75, he had been in residence for 38 years. According to rumor, he had grown to believe the place his property and attempted to will it to his heirs. Needless to say, no such will was ever probated, but the story is typical of the legends that have grown up around the oldest landmark in Marine Corps history.

But if Henderson's personality colors these legends more than those of other individuals, the house owes its existence in large part to the energies of two earlier Commandants, William Ward Burrows (1798-1804) and Franklin Wharton (1804-1818), each of whom held the post with the rank of lieutenant colonel.

The United States Marine Corps of today, as contrasted with the Continental Marines of the Revolution, was activated on 11 July 1798, when President John Adams signed "an Act for . . . establishing and organizing a Marine Corps." The following day the President appointed Burrows "Officer Commanding the Corps of Marines" with the rank of major. This rank and designation he continued to hold until 1 May 1800, when he was promoted to "Lieutenant Colonel Commandant," an office approved by Congress a short time previously.

When Lieutenant Colonel Commandant Burrows received his promotion, the national government was in Philadelphia waiting until the new, elaborately laid out Federal City could be sufficiently developed to accommodate it. A labor shortage and limited financial resources had delayed this work, but finally on 15 May 1800, President Adams issued an executive order directing all departments to transfer to Washington by 15 June. There, Secretary of the Navy William B. Stoddert opened his office in one of the "Six Build-



ings" located on Pennsylvania Avenue between what are now 21st and 22d Streets, NW. The movement of Headquarters Marine Corps was delayed by considerations of transportation, housing and the uncertainty as to whether it should be located in the scanty accommodations of the city proper or in some adjacent town.

On 23 June 1800, Secretary Stoddert wrote LtCol Burrows:

"I have had so many things to attend to since my arrival here, that I have scarcely been able to think about the Marines. . . . A thousand reasons plead for your being at once in the city instead of stopping at Bladensburg. . . . I think you had better hold yourself in readiness to leave Phila. with all your dependencies in a few days — but not to move until you hear from me. . . ." The Commandant acknowledged this on 26 June, adding: "I only await your Orders and shall repair immediately to any place you shall direct."

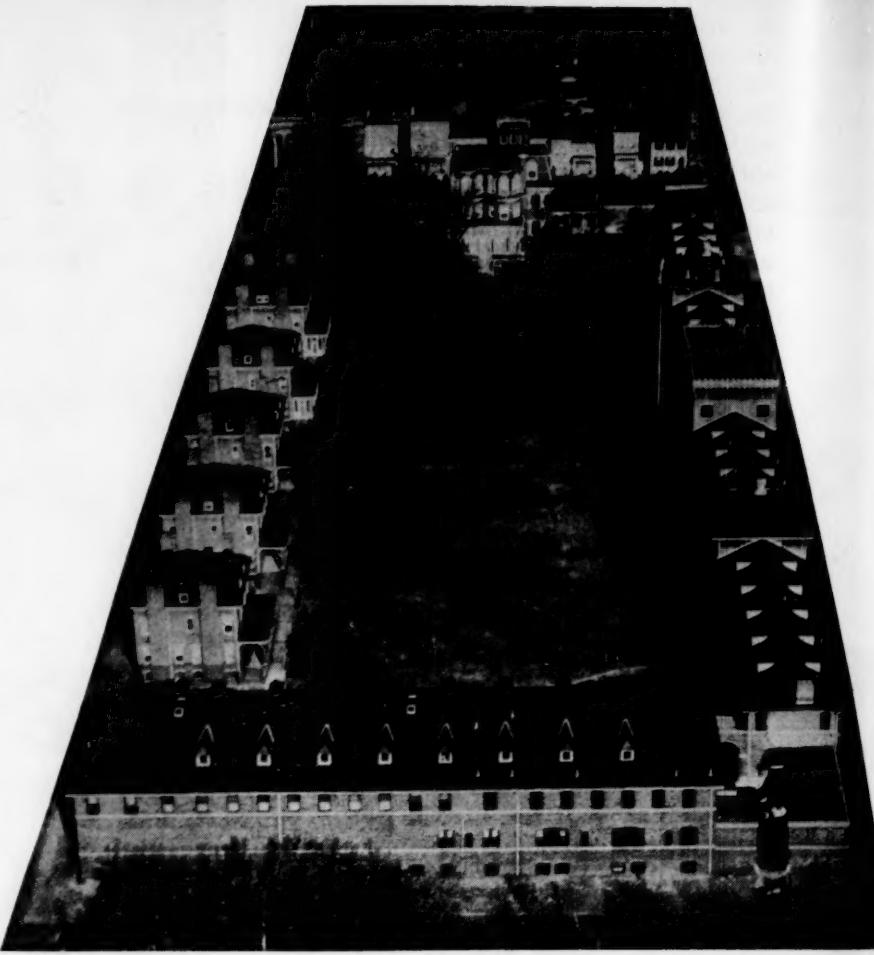
Then on 3 July in another letter to the Secretary and following some discussion of housing — or the lack of it — Colonel Burrows wrote:

". . . but I care not for myself where my house is, so I can get my men comfortably provided for."

Following receipt of final orders for the move, the Commandant and his staff reached the city on 15 July 1800 and established temporary headquarters in a private house in Georgetown. The house also served as living quarters for LtCol Burrows and his officers.

Within a few days Marine troops began arriving by ship, by stage and afoot. The first contingent pitched tents on Prospect Hill, on the Georgetown side of Rock Creek. But upon the arrival of a vessel loaded with additional men and camp gear, the Marine campsite was relocated on what was known as Camp Hill or Peter Hill, near "E" Street between 23d and 25th Streets, NW. This tract had been reserved for a National University but the school was never authorized. It subsequently became the site of the Naval Observatory and Naval Hospital successively.

Lieutenant Colonel Burrows was not satisfied with his makeshift headquarters arrangements, but the troops were comfortable enough in camp during the warm weather. With the approach of winter, how-



Square No. 927: in 1801, four cents a square foot

ever, the housing shortage (that was to be a perennial problem of generations of Washingtonians as yet unborn) began to press the United States Marine Corps. On 11 November, one day after celebrating the 25th anniversary of the Corps, the Marines moved from their tent camp to a building rented from the War Department and converted into barracks. The Commandant, meanwhile, made requests of the Congress for an appropriation to build permanent accommodations for a sizable body of troops and their officers, together with office facilities necessary to headquarters operations.

ON 4 MARCH 1801, Thomas Jefferson succeeded John Adams in the Presidency. Having been Vice-President during and after the move of the government to Washington, Jefferson was well acquainted with the growing pains of the new capital city. In addition, the President was interested in the Marine Corps and

was a personal friend of the Commandant.

In writing to one of his officers on 31 March 1801, LtCol Burrows related:

"I have been all this morning engaged riding with the President looking for a proper place to fix the Marine Barracks on."

This ride covered the entire area between the Capitol and the new Navy Yard. The President was primarily interested in this section because he envisaged the Marine Barracks as a permanent military garrison at the seat of government. In June of 1801, he authorized the purchase of Square Number 927 because, "it lay near the Navy Yard and was within easy marching distance of the Capitol."

This tract is bounded by 8th and 9th Streets, SE, and lies between "G" and "I" Streets. Then, as now, Square 927 measured 250 feet east and west, and 615 north and south.

Since Congress had appropriated \$20,000 for the building project as early as 3 March and plans had been submitted and approved, construction work began at once.

Even in 1801, \$20,000 was not exactly a lavish sum for the erection of housing for 500 men and their officers, plus a residence suited to the position of the Commandant. This was recognized by the Secretary of the Navy who wrote to LtCol Burrows: ". . . with the aid of the mechanics and others of your Marines, that barracks may be erected for \$20,000, which without such aid, would cost \$50,000."

The Commandant approved, with the result that Marines of those early days in large measure erected the quarters that they themselves and their successors would occupy for more than a century.

But other problems soon appeared. The appropriation of \$20,000 had to cover the purchase of land as well as construction costs. The cost of Square 927 quickly rose from the estimated \$4,000 to \$6,247.18, or four cents a square foot. Then President Jefferson very nearly crippled the project by attempting to divert an additional \$4,000 for improvement of Pennsylvania and New Jersey Avenues. The President was dissuaded only by the most strenuous arguments of the Secretary and the Commandant.

In view of these limited means, LtCol Burrows, in keeping with his zeal to "get my men comfortably provided for," gave priority to the barracks over construction of any residence designed for his own use. As a result he was the only Commandant in the history of the Marine Corps, subsequent to the removal of the seat of government to Washington, never to occupy the now familiar house at the northern end of the quadrangle. Ill health forced him to resign his office on 7 February 1804. Just at this time the southern wing of the barracks and the center house officer's quarters were ready for occupancy, and work on the Commandant's house was getting well under way.

Lieutenant Colonel Franklin Wharton, who succeeded Burrows as Commandant, was a man of independent means with a taste for the amenities of life and no relish for living in rented quarters any longer than necessary. Therefore, he pushed

construction of the house simultaneously with that of the northern wing of the barracks. Without doubt his project was expedited by what he termed his "indulgence" toward his Marine laborers: exemption from military duties and issuance of an additional gill of rum per day. However effective this may have been, both barracks and residence were completed, according to the best available evidence, either in late 1805 or early 1806.

THE COMMANDANT'S HOUSE faces south on the barracks quadrangle and north on "G" Street. Now considerably enlarged, the original version boasted two stories, topped by an attic with dormer windows under a hipped roof. The main floor was divided into two large formal drawing rooms on the south or barracks side, and across the north or "G" Street side were a main hall, vestibule and two smaller rooms. The easternmost of the latter was used as a dining room and was served from a kitchen in the basement. The second floor contained two large bedrooms on the south and three smaller ones on the north. Small rooms for servants' quarters and storage space divided the attic.

No documentation definitely establishes the architect of the Commandant's house, but its graceful lines and well proportioned dimensions indicate that it must have been designed by a man who was well qualified in his profession.

According to some secondary sources of information, Benjamin Latrobe was responsible for the plans. Latrobe was a well known Washington architect in the early part of the 19th Century. He designed a number of houses in the Capitol Hill area including "The Maples," the home of Captain Duncanson on "D" Street, SE (which was built before the Revolution), and he was the author of the original plans for the Navy Yard. In this latter work he undoubtedly drew the plans for the Navy Yard Commandant's house and this fact, it is believed, has confused him with the architect of the Marine Corps Commandant's house. No other available evidence, including Latrobe's own papers, link him in any way with the house on "G" Street.

Other writers have claimed that

the Commandant's house was designed by Charles Bullfinch, who later (1818-1830) served as Architect of the Capitol. Bullfinch was one of the earliest advocates of the circular bay and is supposed to have designed at least one residence — the house of the commanding officer of the Boston Navy Yard — with double circular bays similar to those on the Commandant's house. This and the presence of rounded drawing rooms in both houses gave some little credence to the Bullfinch theory. No primary records have been found to support it, however, nor do any of Bullfinch's papers, including his letters and diaries, make any mention of the house for the head of the Marine Corps. An examination of the house in Boston, moreover, revealed little or no real similarity of plan or design between the two houses.

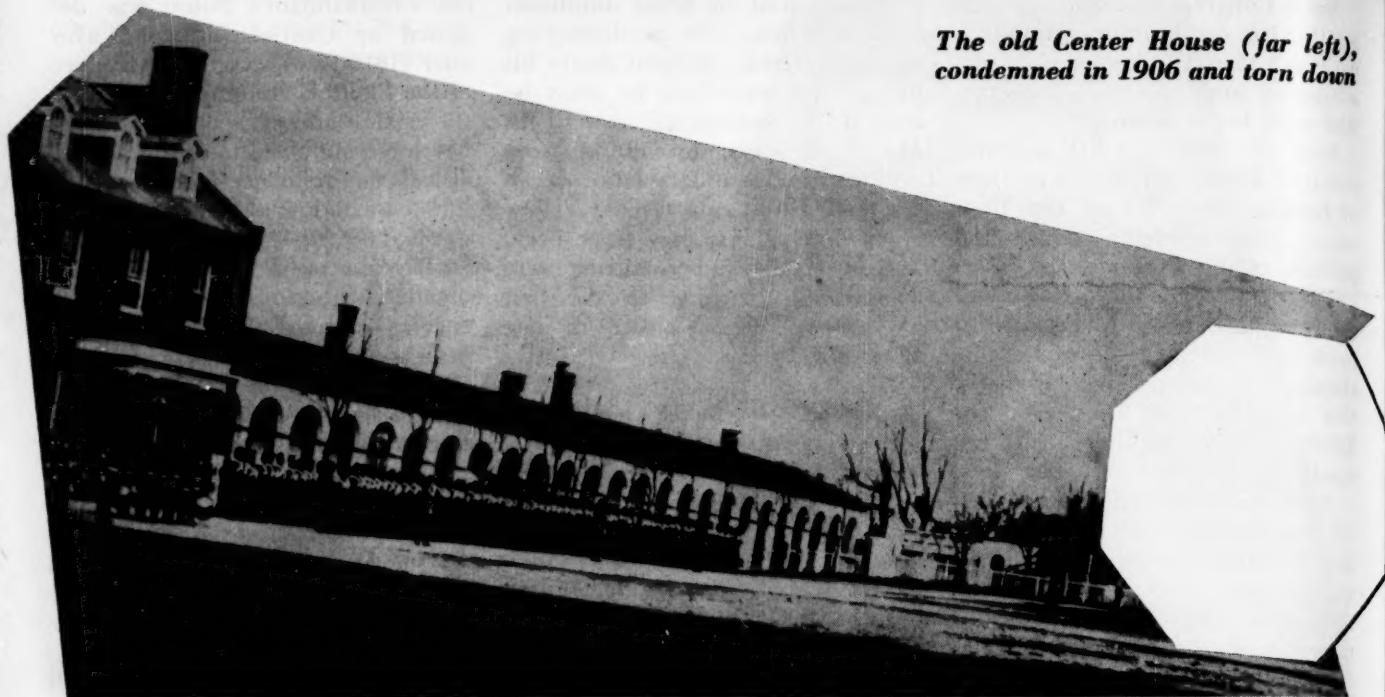
With the practical exclusion of the once leading contenders for possible architects of the Commandant's house, Latrobe and Bullfinch, attention falls on Anne Louis de Tousard who is the only person known to have submitted a plan for the Marine Barracks.

The case for Tousard may be summed up as follows:

On 4 May 1801, Tousard submitted a "very elegant plan of Barracks for the Marine Corps," to General Henry Dearborn, the Acting Secretary of the Navy, who, in turn, referred it immediately to President Jefferson. Lieutenant Colonel Commandant Burrows learned that such a plan (author unidentified) had been submitted to the President on 8 May 1801. This may well be the plan which the President approved four days later. The time element involved gives much credence to the assumption that the one so approved was that of Tousard.

A long search for the actual designs approved by President Jefferson has so far proved fruitless as has the effort to find any other primary evidence linking Tousard to the Commandant's house. He has, nevertheless, the best and most reasonable claim to being the architect concerned. It is hoped that further search of certain of President Jefferson's miscellaneous papers and additional personal papers of Tousard will settle the question finally.

Whoever may have designed the house, its construction went forward



The old Center House (far left), condemned in 1906 and torn down

under LtCol Wharton during 1804 and 1805.

The bricks used in the building of the house were, by modern standards, somewhat crude and unusual in shape and quality. These were made in moulds holding six bricks each, of clay dug from a pit lying midway between the barracks and the Navy yard. The quality has been described as "very soft salmon" i.e., under burned, which necessitated extra thick walls — three feet in this case.

More than a century later MajGen Barnett, reminiscing on his residency from 1914 to 1920, described the house as ". . . securely and solidly built—far different from many houses of today the partitions and walls of which are so thin that a whisper can be heard through them . . . these . . . walls are so thick that they should stand almost forever; scarcely a sound can be heard from one room to the next."

The Commandant's house owes its claim of being probably the oldest public building in continuous use in the Nation's Capitol to the fact that, whether by accident or design, the British failed to destroy it or the barracks during their hit-and-run raid on Washington in August 1814. They burned the Capitol, the White House (then called the Presidential Mansion or "Palace") and most of the other public buildings in what they described as retaliation for a

similar American descent on York (now Toronto), capital of Upper Canada, the previous summer. This rather conspicuous omission gave rise to speculation which later attained the status of legend.

One theory explains that Admiral Cockburn and General Ross, commanding the British raiders, found the size of the house and its location convenient so spared it to use as their headquarters. Subsequently, they neglected to apply the torch in the haste of a withdrawal so precipitate that they left their own wounded behind.

Others relate that the magnificent stand of the Marines at Bladensburg so impressed General Ross that he ordered the house and barracks left untouched as a gesture of soldierly respect. Residents of the neighborhood at the time in question, however, are reported to have declared that they simply appealed to the better nature of the British by pointing out that a fire at the barracks, in contrast to the burning of the comparatively isolated Capitol and White House, would almost certainly result in the destruction of much adjoining private property.

Another legend growing out of the British incursion concerns the always fascinating subject of buried treasure. The details vary but *dramatis personae* consisted of two sergeants supposedly assigned to bury a chest

containing some Marine Corps funds. The early stories specified the amount of this money as \$2,500 in cash which had been kept on hand for "contingent expenses." This amount later expanded in popular imagination to "at least \$50,000." One version of the story has the two sergeants rejoining their comrades in time to be killed in action at Bladensburg. According to another, they were killed in a desperate floor-to-floor defense of the Commandant's house, as witnessed by numerous bullet and bayonet scars said to have been found on the front door and interior walls. In either case, the secret location of the buried money died with the sergeants. Of course, the chest has never been found.

Unfortunately for the story, Marine Corps, Navy Department and Treasury files contain no record of any such loss during this period. Furthermore, LtCol Wharton, after sending all his available men into combat under Captain Samuel Miller, the post adjutant, loaded everything of documentary or monetary values into a wagon and, in company with his paymaster, proceeded to Frederick, Maryland.

There appears to have been nothing unique in the Commandant's departure since every high official of the government from the President down evacuated the Capital upon the approach of the British. There

were, however, those who professed to view his action as not completely in keeping with the fine fighting tradition the young Marine Corps had already established in actions against the French, the Barbary Pirates, and now the troops of George III. Especially vehement on the subject was the Corps' third ranking officer, blunt, outspoken young Captain Archibald Henderson who spent most of the War of 1812 with the Marine Detachment aboard the much embattled USS *Constitution*. Stung by what he considered a disgrace to his Corps, he preferred

in the end, however, when Anthony Gale was appointed Lieutenant Colonel Commandant on 3 March 1819. Gale had been the officer next senior to the previous Commandant and his appointment upheld a very firm military tradition of his day.

Anthony Gale was the fourth Commandant of the Marine Corps, and the third to hold the rank of lieutenant colonel. His term in office was limited to 19 months. In addition to other personal troubles, he fell into the bad graces of the Secretary of the Navy. On 17 October 1820, a court-martial found against

one and himself brevetted to brigadier general. In 1859 General Henderson died in the house where he had lived for more than half of his entire life. He had served as Commandant under 11 Presidents, and it is recorded that President Buchanan and members of the Cabinet attended the General's funeral.

Perhaps his spirit returns occasionally to visit the home he occupied so long. At any rate, it is related that the wife of a much later Commandant awoke during her first night in the house to find an elderly gentleman with a white fringe beard, attired in the archaic Marine dress uniform of the 1850s, seated in a chair before the smouldering embers of her bedroom fireplace. After a few seconds he rose, bowed ceremoniously and unceremoniously vanished. The following morning, when her husband entered her bedroom, she described her visitor of the previous night. When the Commandant returned home that evening, he brought with him a portrait of General Henderson. Upon seeing it, his wife exclaimed, "That is the grey bearded gentleman who was in my room last night!"

General Thomas Holcomb relates that on the evening he signed the order establishing the Women's Reserve, he remarked to his dinner guests that, "Old Archibald would certainly turn over in his grave if he ever found out that females could become commissioned officers in his beloved Marine Corps." Hardly were the words out of his mouth when General Henderson's portrait, which hung over the sideboard, crashed to the floor.

THE FIRST NOTABLE improvements and additions to the Commandant's house, and the barracks as well, occurred during Henderson's tenure. The work was largely done while he and his Marines were off at the Indian wars in Florida. In 1836-37 a \$400 cast-iron fence was erected to separate the house from the parade ground. At the same time a colonial style veranda was added to the north, or "G" Street, side and the entire house was repainted, all for \$3,000. The year 1840 saw a two-story annex built on the northeast corner which enlarged the dining room, provided an extra window, and added a butler's pantry along

charges against LtCol Wharton. To Captain Henderson's considerable disgust, a court-martial cleared Wharton who continued in office until his death on 1 September 1818.

In addition to his vindicated professional standing, the third Commandant remained personally a cultured gentleman of unblemished reputation. His dying in office, nevertheless, presented the Marine Corps with another problem. While the administration debated the permanent appointment of a successor, the forceful Henderson took over in an acting capacity. Seniority won out

him and he was dismissed from the Corps.

This time there was no question, and Archibald Henderson moved into the Commandant's house to become the longest tenant in its extended history. It was while residing here that the fifth Commandant led virtually the entire available strength of his Corps in an extended campaign after tacking to his office door the terse message: "Gone to Florida to fight the Indians. Will be back when the war is over."

During these same years he saw the rank of his office raised to col-



Mrs. Vandegrift discovered a fireplace

the eastern side of the dining room, a back hall and service stairs. This annex increased the size of the bedroom above and made provision for a bathroom, the first one in the house (and the only one until about 1914). It was also in 1840 that a one-story addition was constructed on the west side with north windows opening through the high wall that enclosed the barracks quadrangle.

It was not until Colonel Commandant Charles G. McCawley lived in the house that further major changes were instituted. The need for certain repairs had become so pressing that in September 1889 Colonel McCawley appointed a board of survey to examine the situation. In its report the board recommended conversion of the attic to a third story, replacement of the old roof with the present mansard roof, and addition of a second story to the west wing. In June 1890 the Congress appropriated \$7,550 to accomplish these recommendations, but work did not commence until March of the following year after Colonel Charles Heywood had succeeded McCawley as Commandant. The changes originally specified by the board of survey were then carried out and, in addition, the colonial style veranda or portico facing "G" Street was replaced by the entrance now in use.

About 1907 Brigadier General

Commandant George F. Elliot directed the removal of the narrow open porch on the south side of the house and the substitution of the present enclosed porch. This alteration did not meet with the approval of some of the traditionalists. Brigadier General Charles L. McCawley, son of the eighth Commandant and hence long familiar with the establishment, declared that this change "to my mind ruined the parlors and appearance of the house."

At the same time this work was done a conservatory that had been along the north wall west of the house was removed. Concurrently, in the northeast corner of the compound between the house and the stable, a small glass hothouse was erected.

When George Barnett moved in as Major General Commandant in 1914, he found the interior woodwork of his new home painted a gloomy color known to the cognoscente as "Heywood brown." The ninth Commandant had been firmly convinced that wood of this color outlasted all other. Evidently this belief had been shared by his two immediate successors, perhaps out of deference to the much admired Colonel Heywood. General Barnett, however, had convictions of another sort. As he later related, ". . . One of the first things I did was to change the color of the woodwork from brown

to white which in my opinion . . . improved the appearance of the house 100 per cent."

In 1915 General Barnett had the third floor remodeled to provide adequate servants' rooms and bath. As the master bedroom on the southeast corner of the second floor had no bathroom of its own, he had an addition constructed on the east side of the house south of the service hall from the basement to the second floor. This provided a waiting room and half-bath on the first floor and the necessary large bathroom on the second. About the same time, in keeping with the march of progress, the stable was converted into a garage.

A very notable addition to the furnishings of the house was made during General and Mrs. Barnett's residence. After a long and painstaking search, portraits of the first 11 Commandants (with the exception of the fourth Commandant, of whom no known likeness has ever been found) were hung in the dining room, main hall and two drawing rooms. To this collection has been added the portrait of each succeeding Commandant.

During all the years while changes were being made to the Commandant's house, protracted hard usage had caused the Marine Barracks to fall into a condition which periodically necessitated extensive repairs. This, and a pressing need for more room, resulted in the movement of Headquarters Marine Corps on 10 June 1901 from the barracks to a Washington office building at 14th Street and New York Avenue, N. W. At this time new construction had commenced on buildings to furnish office, band and recreation facilities. These, in turn, had to be temporarily converted to troop quarters in 1902 when a board of Navy medical officers condemned the old quarters as unfit for human habitation. The condemned quarters were torn down and completely rebuilt after appropriation of necessary funds by the Congress. Perhaps appropriately, the last of the original buildings to go was among the first to have been completed. The Center House junior officers' quarters which Lieutenant Colonel Commandant Burrows had pushed to completion in 1804 was finally condemned in 1906. Within a year or two the quadrangle

had assumed essentially the appearance it presents today.

The last major alterations made to the Commandant's house occurred in 1934, shortly after MajGen John H. Russell, Jr., moved in as the 16th Commandant. For many years the house had presented an unsymmetrical appearance from the outside. This dated back to the larger extension built on the west side in Henderson's time. Accordingly, General Russell decided to balance the east side by enlarging and improving the proportions of the dining room. This addition also made possible movement of the kitchen and serving facilities from the basement to the first floor. At the same time, the sun porch atop the enclosed south veranda (which had cut off much light from the two upper rooms) was removed. The first bathroom which had been installed in 1840 (now adjacent to the northeast guest room) was also remodeled.

Mrs. Russell took the opportunity presented by the other work to have the interior completely renovated in order to restore its original atmosphere. This enterprising lady visited Mount Vernon, the Lee Mansion and the old American section of the New York Metropolitan Museum. She consulted with period experts to assure authenticity in the selection of appropriate colors and decorations. She chose and had installed the fine chandeliers and many of the excellent period reproductions which grace the interior.

One of the host of experts who assisted Mrs. Russell was the wife of MajGen L. McCarty Little, USMC. Mrs. Little was a professional decorator of national reputation and she devoted her time and energy in a generous fashion. It was Mrs. Little who presented to the 16th Commandant the pair of handsome Regency English chairs which today are in the East drawing room.

Among other furnishings of interest seen by the present-day visitor to the Commandant's house are the Perry prints which were presented to the 13th Commandant, MajGen John A. Lejeune, shortly after he moved into the house. These lithographs were made from sketches drawn by a civilian artist, William Heine, who accompanied Commodore Matthew Calbraith Perry on his famous expedition to Japan in 1853

and 1854. The prints were presented by Colonel Slocum, USA.

Also of interest is the Adams mantle (pre 1800) over the fireplace in the small reception room off the entrance foyer. This fireplace had been bricked up and plastered over. It was discovered by Mrs. Archer Vandegrift, wife of the 18th Commandant, in the course of some redecoration work. She obtained the mantle from a friend, and had it installed over the re-opened fireplace. It should further be noted that it was Mrs. Vandegrift who designed the graceful south porch with its wrought iron lamp posts and hand rail which faces the parade ground. She, too, was responsible for the landscaping of the charming garden which lies just to the west of the house.

It was the 20th Commandant, General Lemuel C. Shepherd, Jr., who replaced in the house the desk which had belonged to the fifth Commandant, BrigGen Archibald Henderson. In this desk is presently displayed a collection of crystal which had belonged to a distinguished Marine Corps officer of early days. The collection was the property of LtCol John M. Gamble, who is best remembered as being the only Marine Corps officer ever to command a United States man-of-war in action against the enemy. The crystal was donated by his great grandson, Robert E. Quinby.

One pleasant custom long associated with the house is the annual serenade of the Commandant by the Marine Band each New Year's Day morning. In the recently made available private papers of Francis Scala, Leader of the Band (and first to rate the capital "L") from 1855 to 1871, claim is made that he started the

custom on the last New Year's Day of the Civil War. The first recipient, Colonel Commandant Jacob Zeilin, was no doubt pleasantly surprised as were the bandsmen, in turn, when he invited them to come into the house where he ordered hot buttered rum and breakfast for all hands. From the seventh Commandant to the 20th, this tradition of mutual "surprise" has, by tacit understanding, come down through the years.

Over the years, Commandants have come and gone, but the Commandant's house, in the words of General Barnett, "should stand almost forever."

The symbol of countless traditions, it is a link with a proud past for leaders who must command the present and plan for the future. On the whole, the Marine Corps has been most fortunate in the men appointed to its highest office. The Corps was well served by William Ward Burrows who did so much to give it a firm and enduring foundation, by Archibald Henderson who enriched its traditions and raised its prestige during his long years in office, by Barnett, Lejeune, Holcomb, Vandegrift, Cates, Shepherd and all the other fine leaders who have seen it through ever recurring crises.

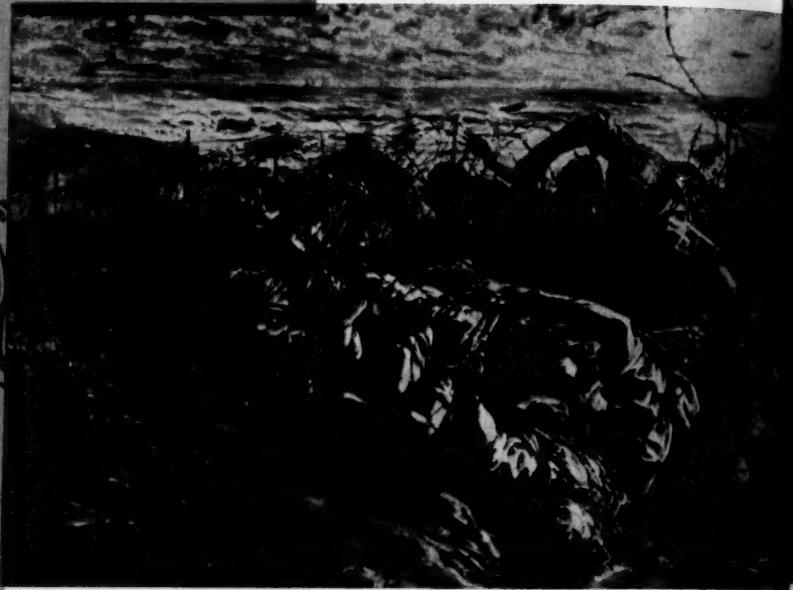
No doubt these officers have transmitted more of their character and individuality to the Corps than would have been possible in a larger, less closely knit service. In the final analysis, however, it has been the great mass of men serving their country as Marines who have really originated, developed and sustained the unique personality and esprit de corps to which the Marine Corps' oldest landmark stands as a monument.

US MC

Tradition of "mutual surprise", . . . down through the years



JAPAN'S AMPHIBIOUS



By Robert B. Merrifield

All illustrations are reproductions of Japanese war-art paintings now in Ueno Museum, Tokyo, Japan.

THE STUNNING BLOW OF THE Pearl Harbor attack, and the almost incredible swiftness with which the Japanese Army and Navy swept over most of southeastern Asia, Malaysia, and Micronesia, appalled the average American in those early, dark days of World War II. How had the Japanese conquered such an immense, island-studded empire? The answer can be found in the catalogue of their operations: the successful application of amphibious doctrine in modern warfare.

In December 1941, amphibious warfare was nothing new to the Japanese. They have been credited with seizing their own homeland by this mode, and through the centuries had occasion to wage amphibious

For centuries they had waged amphibious war. Yet their WWII operations lacked distinction—techniques were never polished

tactical command of the China Area Fleet. This Shanghai Special Naval Landing Force (SNLF) was partially responsible for defense of its assigned station and vicinity. In time of emergency, Japanese diplomatic officials could call on the SNLF for the purpose of protecting Japanese subjects in the vicinity of Shanghai.

About four years later, SNLFs were authorized at four naval districts in Japan. Though naval in personnel they resembled the army in organizational structure. SNLFs were not designed to be the cutting edge of an amphibious attack. They were to be used only in areas where strong land combat strength was not required in the landing attack, and in the invasion of isolated islands in which the Army had little concern.

The Imperial Japanese Army, unwilling to be beholden to the Navy, gave its own troops special training in landing operations.

The Japanese timetable of aggression had been conceived around 1938, and was known as the Basic

Plan for the Greater East Asia War. The details of the Basic Plan were very simple, and were grouped in three logical steps:

1. The "Southern Areas"—Malaya and the East Indies—rich in resources were to be seized. The U. S. Pacific Fleet was to be attacked and immobilized. Strategic areas and positions for the establishment of a defensive perimeter linking the Kuriles, Marshalls (including Wake), Bismarcks, Timor, Java, Sumatra, Malaya and Burma were to be seized.
2. The defensive perimeter was to be consolidated and strengthened.
3. Enemy attacks designed to breach the defensive perimeter were to be intercepted and destroyed, and concurrent attritive operations were to be conducted against the U. S. commerce to destroy that nation's will to fight.

To accomplish the first step in the Basic Plan, the Japanese launched an amphibious war in the Pacific. First, Allied air and naval power was

warfare against a number of opponents on the Asiatic mainland. The best and most modern experience in this art stemmed from the undeclared war with China. In 1937 the Japanese Army performed large-scale landings on the Yangtze Delta not far from Shanghai. These operations were not faced with determined beach resistance. However, they provided troop training and also afforded an opportunity to test six or seven different types of landing craft under battle conditions.

Despite the valuable lessons in amphibious techniques the Japanese learned in China, no organization evolved in the military structure for the purpose of development, refinement and prosecution of amphibious warfare. Actually, a special organization within the Japanese Navy did possess vestigial similarities to the U. S. Marine Corps. This was the Special Naval Landing Force. The first unit of this type was activated 1 October 1932. It was about the size of two Army battalions, and was assigned to stations in the Yangtze River area near Shanghai under the



to be crushed with a series of simultaneous surprise attacks against the Hawaiian Islands and the Philippines. On the heels of this initial blow would come coordinated and simultaneous surprise landings in force on Guam, the Philippine Islands and Malaya. The Twenty-fifth Army was to take Malaya; the Sixteenth Army had as their responsibility the Netherlands East Indies; the Fifteenth Army was assigned to Thailand and Burma; the Fourteenth Army drew as their lot the conquest of the Philippines; the Twenty-third Army was given the task of taking Hong Kong; and the South Seas Detachment was to seize the Pacific Islands.

Although the Japanese hoped to launch their attack in the phase of the waning moon so that the darkness of night would conceal their movements, the crisis of the international situation and the necessity of coordinating amphibious operations with a Sunday strike at Pearl Harbor, forced them to forego this arrangement.

The Malaya campaign had been organized, and the units involved had been alerted since early November 1941. By the second of the following month, D-Day had been set for 8 December. On 4 December, 19 escorted transports departed from Samah Bay, Hainan. Their ultimate destination was the eastern shore of the Malay Peninsula.

On the night of 7 December, the moon was rising as part of the transport force dropped anchor off Singora in the peninsular sector of southern Thailand. The sea was running high, and difficulty was encountered in transferring the landing element of one reinforced division from the transports to the landing craft. The high breakers upset, sank, or ran aground, many of the first wave of boats; however, no opposition was encountered, and the first troops had secured the beach-head by dawn.

Farther down the coast at Kota Bharu, just within the border of British territory, the second half of the convoy anchored about the same time as had its sister detachment up the coast. Part of the assault force of one reinforced division began debarking immediately. They were aided by the bright tropical moon but hindered by a heavy sea. They



Shanghai: employment of a special organization

wondered if the presence of the convoy was still undetected by the British.

Within an hour the first assault force began to move toward the beach. At this moment the cruisers and destroyers began to rake the beach with gunfire. At first there was no response, but when the counterfire began, it inflicted heavy casualties in the open boats of the assault force. Those troops fortunate enough to reach shore became entangled in barbed wire, and were mowed down by machine-gun fire.

With fiasco a distinct probability, the Japanese commander began to seek a way out of his dilemma. As he watched the gun flashes from the shore he noted dark areas, and correctly surmised that these represented unfortified regions where his troops could effect a landing. While the warships kept the defenders pinned down, the remaining boats gathered survivors out of the water, and put them ashore at the unprotected sites. Once on the beach the forces quickly fanned out and moved inland to break up any possible counterattacks. By sunrise the troops had progressed 1,000 to 1,500 meters from the beach, and by noon of the 8th, the Singora division had pushed so far south that the British were obliged to withdraw southward or be encircled.

After an inauspicious start, the Japanese war machine was set to roar through Malaya.

The Army favored the thrust



Pearl Harbor: a key to the plan

through the Malay Peninsula to Singapore as the main line of attack toward the oil fields of the Dutch East Indies. A second and coordinated attack through the Philippine Islands was to parallel the Malaya operation. This meant taking on the Americans as well as the British, but the Japanese Naval Staff felt that Anglo-American interests were so inter-twined that it was naive to consider fighting a war in the Far East without involving the United States. Once the Philippines were in Japanese control, the Malaya operation would have its rear protected and another springboard could be readied for the attack on Java and

Sumatra. Manila Bay was an excellent port and possessed the added advantage of being strategically located.

Through use of Formosa-based Army aircraft and Navy carrier planes, the Japanese planned to crush American air power in the Philippines at the same time the Pearl Harbor striking force was eliminating the threat of the U. S. Pacific Fleet. Inclement weather caused the air attack against the Philippines to get off to a poor start, and for the most part cancelled out the possibility of a surprise attack. However, the Japanese were fortunate. The end result was the same as they had hoped to achieve with the

aid of a sneak attack—the backbone of American air strength was broken.

Even before American air power had been accounted for, the Japanese were involved in the invasion of the Philippines. At dawn, 8 December, 450 troops were landed on small Batan Island, adjacent to and directly north of the archipelago. The possession of this tiny isle bore little significance in itself, but as a part of Japanese amphibious tactics it loomed large indeed. Seizure of this island was prompted by Japanese concern over the short range of their Army fighter aircraft. Army leaders wished to have their operations covered by land-based aircraft, and were reluctant to undertake any landing that fell outside the range of their fighters unless carrier support was available. The Army did not want to be overly dependent on the flattops and, to achieve independence, the primary objective following a landing was to capture and make operational any and all air fields. The Japanese were to follow this pattern in every landing of the Pacific war.

The Navy furnished air cover until the Army could advance to the area, and most of the planes involved in the Philippine campaign were carrier based.

Two days after Batan Island had been taken, a portion of the same force seized Camiguin Island, farther south and adjacent to Luzon. At the same time a pre-dawn landing was being attempted at Aparri on north-

ern Luzon. A battalion of Japanese infantry planned to be ashore by dawn, but heavy surf and a company of American defenders nearly frustrated their attempt. Two companies managed to get ashore. The rest of the troops were put ashore about twenty miles down the coast where a quieter sheet of water afforded an anchorage. Here the force was set upon by American fighter planes. However, greater confusion was caused by the Japanese warships escorting the convoy: in their haste to retire from the area, they forced the transports' crews to heave overboard the drummed oil, with the hope that it would drift ashore. Some important heavy equipment that should have been unloaded was still aboard the transports when they retired from the scene. Nevertheless, the landing was effected and the Aparri airstrip was in Japanese control by early afternoon of the same day.

The series of landings that followed in quick succession — Pandan (near Vigan), Legaspi, Lingayen Gulf, and Lamon Bay — were eminently successful. American resistance was rolled up like a rug, and by early January the defenders were cornered on Bataan Peninsula.

These unqualified successes tended to obscure the fact that the landings were handled in a somewhat less than satisfactory manner. The Lingayen Gulf operation, though successful, had that "all-thumbs" appearance. To begin with, the anchorage was changed several times because the surf proved too heavy for the flimsy landing craft.

"At this point the Lingayen Force presented an excellent picture of how not to run an amphibious operation. To avoid one danger [landing craft capsizing in the heavy surf], the ships moved into the inner bay, and there encountered another—American coastal batteries. The 48th Division, [Japanese] busy establishing positions in the defile near Rosario and Camp I in order to thwart anticipated reinforcements, was unable to detach a sufficient force to silence the guns. Practically no communication existed between elements ashore and those afloat; even ship-to-shore signaling was inadequate. But lack of adequate air opposition, vastly superior force, and good work by the one element of the



Wake Island: landing operation stymied





Hong Kong: outpost of an Empire overwhelmed

plan that clicked—the arrival of the advance infantry detachment from the Vigan Support Force—assured final success."¹

Japanese amphibious tactics in the Bataan campaign differed materially from previous operations on Luzon. Here amphibious operations were used for the purpose of turning the flank of the American-Filipino forces. This tactic proved to be extremely vulnerable to the attack of gunboats, motor torpedo boats, and the few remaining Allied war planes. These amphibious end runs were not of major proportions, and since they lacked necessary support from Japanese surface forces and air power, they amounted to little more than harassment to the exhausted and overwhelmed Allied forces.

For the invasion of the Dutch East Indies, Davao, located on the underside of Mindanao, was viewed by the Japanese as the most desirable base of operations. With this in mind, an attack force from the Palau's landed at Davao in the early morning hours of December 20. Carrier-based aircraft constituted the air cover, but little resistance was encountered and by nightfall of the same day, a seaplane base had been set up near by.

Before dawn on Christmas day, a force of 4,000 troops from the Davao assault group seized the island of Jolo between the Sulu and Celebes seas. By noon the island was in Japanese control, and in the course of

the following day a naval air station was set up. This was the last major landing operation in the Philippines.

The amphibious tactics employed by the Japanese in the Philippines campaign had certain prominent features. The foremost of these was the element of surprise.

"Surprise was the keynote. American forces were largely concentrated about the center of Luzon. The size of that island and the large number of small islands in the vicinity made tactical surprise comparatively easy. To avoid giving away the target, Japanese planners eliminated surface bombardment of shore objectives as well as tactical air bombardment. They also delayed their strategical bombing of the sources of [Allied] air power until after the convoys were under way."²

In the lower Philippines, another feature of Japanese amphibious tactics made itself evident. This can be called the stepping-stone technique. In operation it amounted to the seizing of a certain strategic position by amphibious attack, and then using that site as a base from which to launch a similar attack against another strategic position. Garrison troops were used to relieve the assault forces, and thus formed an integral part of the technique. As soon as a position had been secured, garrison troops took over and permitted the use of the assault forces elsewhere.

Another feature of Japanese operations in the Philippine Archipelago, and equally well-pronounced in the Malaya-Indies campaign, was the tactic of employing overwhelming naval strength in support of amphibious attacks. The purpose was to obviate any chance of successful challenge by the Allied Navy. The largest types of fighting ships did not cover the landings themselves, but participated in only minor surface action; yet they frequently stood by to render assistance if necessary.

Japan's strategy of simultaneous amphibious operations in the Philippine Islands, the East Indies and on the Malay Peninsula, Guam, Hong Kong and Wake, came with overwhelming suddenness to these outposts of empire. The defense of Hong Kong was vitiated by the fact that its defenders knew they were fighting only a holding action. Unfortified Guam lacked any weapons larger than small arms. Wake, though inadequately fortified, held the enviable honor of being the only occasion in the Pacific War where a major landing operation was stymied.

The first of the two operations against Wake was preceded by three days of Japanese air attacks. These cancelled out most of the island's air strength, and damaged the ground defenses. In accordance with Japanese amphibious doctrine, the convoy anchored under cover of darkness on 10-11 December and began to launch landing craft, but the high wind and heavy sea overturned

Singapore: a fortress



¹Morison, Vol. III, *History of U. S. Naval Operations in World War II*, pp. 174-180.

²Ibid., p. 166.

many of the boats. Although drownings swelled the casualty lists, ordinarily, adverse weather conditions were perfectly acceptable to the Japanese commanders who hoped to capitalize on them in order to achieve surprise.

The second attack on Wake followed the first by ten days. The strength of the assault troops was increased to approximately 2,000. These were SNLFs, some of which had taken part in the occupation of Guam.

Again, despite rough and squally weather, a pre-dawn landing was organized. The cover of darkness would allow an undetected approach and landing. They were possessed by one fixed determination—to seize Wake Island at all costs, beaching the destroyers if necessary.

The Japanese assault came out of the pre-dawn darkness in one wave of four medium landing craft and two destroyer transports. All were grounded on the southern side of the atoll. Most of the initial force was on the beach before they were brought under fire. The armament of the landing group was limited to small arms, mortars and light machine guns. They used neither tanks nor artillery. Their casualties were extremely heavy.

A considerate estimate of Japanese amphibious tactics at Wake seems to indicate that there was exhibited a greater dependence on blind determination than skillful exploitation of American tactical weaknesses.

The Japanese did not wait to con-

ress was amphibiously outflanked



Palembang: the amphibious assault was more successful

solidate their position in either the Philippine Islands or Malaya before attacking the East Indies, which was the greatest economic prize of all. In mid-December a force launched from Camranh Bay, Indo-China seized Miri, Lutong and Seria in Sarawak on the island of Borneo. Using Miri as a base, amphibious detachments fanned out and within a month all of northern Borneo was in their hands.

Meanwhile, a many-pronged scheme of amphibious conquest was launched in the area to the south and east. The stepping-stone type of operation, which had been used to good advantage in the southern Philippines and in northern Borneo, worked like magic in the Netherlands East Indies. Menado, Celebes was seized on 11 January 1942. The units involved were the Sasebo Combined Special Naval Landing Force and the Yokosuka SNLF. The former made an amphibious attack at Menado in conjunction with the latter's paratroop assault on the nearby airfield. Using this base as a stepping stone, the Sasebo Combined SNLF took Kendari in southeastern Celebes and its adjacent airfields on 24 January. Fifteen days later this same unit, assisted by a detachment from another invasion group, occupied Makassar and the neighboring airfield. Two transports of Sixteenth Army troops used Makassar as a springboard to invade Bali on 18 February 1942.

A similar type of amphibious strike netted Balikpapan and Adang,

in eastern Borneo, during January and February 1942.

During the same period, just to the east, a similar series of amphibious hops were being performed. The Kure SNLF and an Army detachment were allotted the responsibility of seizing the island of Ambon as a springboard to attack the island of Timor.

This recurring pattern of operations conducted in stepping-stone fashion was well suited to complement the mobility, speed and surprise that were characteristic of Japanese amphibious tactics. Much credit for the success of such operations, however, must be attributed to the lack of resistance, or only token resistance, encountered in these areas. Nevertheless, the Japanese deserve more than left-handed compliments.

"... The Japanese made these short hops in surprisingly rapid succession. Amphibious operations, preceded by air strikes and covered by air power, developed with terrifying regularity. Before the Allies had consolidated a new position, they were confronted with a system of air bases from which enemy aircraft operated on their front, flanks and even rear."³

While the series of quick amphibious strikes were taking strategic points in the East Indies, the South Seas Detachment and supporting naval forces were active in the Bis-

³Ibid., p. 293.



Borneo: bonanza of oil—five days' campaign

marck Archipelago rounding out the area of Japanese conquests.

Strategically located Rabaul, with its excellent port, was taken by the South Seas Detachment (about the size of a reinforced infantry regiment) in a pre-dawn landing. Simultaneously, nearby Kavieng, New Ireland was occupied by naval forces.

By the end of February 1942, many of the economic riches that Japan sought had been won. Important oil centers on Borneo such as Tarakan and Balikpapan replenished the supply of this precious fuel. Palembang, the nerve center of petroleum-rich Sumatra, had been taken by an amphibious attack 50 miles up the Musi River. Several days earlier, an unsupported paratroop drop of 700 men on Palembang's airfields had been mopped up; but the defenders were inadequate to cope with the later amphibious attack.

The uncomfortable position of the Allies in the East Indies was made desperate by two developments: the

island of Timor, which had furnished a base for fighters ferried from Australia, had been lost to the Japanese; and Darwin, the key Allied base on the northern coast of Australia, had been dealt a devastating blow by Japanese carrier bombers.

The pincers of the Japanese attack were now ready to close on the heart of the Netherlands East Indies and the remaining free link in the Malay barrier: Java. The invasion of this island was to call for the largest amphibious operation yet attempted in World War II.

The 2nd, 38th and 48th Divisions of the Sixteenth Army were given the task of conquering the last major area still in Allied control in the East Indies. Two transport groups lifted the assault forces. The first, totalling 56 troopships, left Camranh Bay on 18 February and headed for northwestern Java. The following day the second group, with 41 transports as a nucleus, departed from Jolo with eastern Java as their ultimate destination. Both groups were

well protected by escort ships, and in addition, RAdm T. Takagi's Eastern Covering Group formed a vanguard of warships to meet any surface force the Allies could offer.

The Allied cruisers *USS Houston* and *HMAS Perth* managed to surprise one assault force in the process of putting its troops ashore, but their havoc-raising raid caused only confusion and moderate loss of lives and transports. It did not disrupt the landing operation, and the two proud ships were cornered and sunk before they could do more damage.

The coordinated landings, although delayed by the last-ditch stand by the Allied naval and air forces, were carried out with negligible resistance. The first landing, at Kragan, about 90 nautical miles northwest of Soerabaja, was effected on the last day of February by the assault force that had formed at Jolo. On the following day, the troops on the 56 transports of the western assault force were put ashore on the extreme northwestern sector of the island.

In a little over a week Java was overrun. Part I of the Basic War Plan had been accomplished with resounding success. Within three months Japan had established control over an economically rich area encompassed in 35 degrees of longitude and 30 degrees of latitude.

But Japan felt that certain fringe areas were necessary to bulwark the defenses of her newly acquired empire. Port Moresby, New Guinea and the Solomon Islands were necessary to strengthen the defenses of the Bismarck Archipelago. Midway was needed to protect the Japanese homeland and the Central Pacific. A foothold in the western Aleutians would reinforce Japan's defensive position in the North Pacific. And finally, seizure of New Caledonia, Fiji and Samoa would cut the U.S.-Australia lifeline. Amphibious operations would be used to accomplish the task.

Amphibious operations had been employed to seize an island-studded empire. Surprise, speed and mobility initially overwhelmed Japan's enemies, kept them off balance and prevented them from consolidating or relieving their positions. Surprise was achieved by pre-dawn landings conducted on moonless or stormy nights. Feints, demonstrations and

reconnaissances were frequently used to fool the Allies. Pre-landing naval bombardment was used sparingly to prevent enemy reinforcements and to protect the flanks of the landing force. But as a tactical weapon, naval gunfire was de-emphasized since it compromised the element of surprise. Aerial bombardment and strafing were often employed several days preceding the landing to "soften up" the defenses. Landing operations kept within range of either land-based or carrier-borne aircraft. Command of the landing force generally remained in the hands of the Army commander, even at sea. The Navy protected the sea frontier, guarded the invasion and cleared the anchorage of mines. Debarkation of landing forces was under the command of the Army.

When the transports dropped anchor, the landing craft assembled around specified transports and, after loading, were dispatched to the beach. Exhaustive amphibious training and rigid discipline were relied on to keep the operation on schedule and to reduce confusion. Since landings during periods of darkness or stormy weather were preferred, these controls were indispensable. During the critical period when troops were being loaded on the landing craft, an attack by enemy planes always created extreme confusion.

On occasions where especially speedy landings were necessary, old destroyers and picket boats were run aground on the beach.

Landing sites were chosen with care, and the importance of capturing Allied air installations is evidenced in Japanese policy of consistently giving them the highest priority.

The list of air fields used by the Japanese in the invasion of the Philippine Islands and the Netherlands East Indies reads like a catalogue of landing operations. Invasion operations were carried out on the basis that the standard bound of attack was the distance that offered sure success in aerial warfare, generally less than 400 miles.

The air force had certain essential duties in invasion operations, and these, in order of importance, were: annihilation of enemy air power, annihilation of enemy sea power, air



Philippines: seizure of air fields given highest priority

cover for invasion units, cooperation in anti-submarine activity in support of invasion units, reconnaissance, attacks in cooperation with land operations on strategic areas (if necessary) and operation of air transports for parachute units.

The troops usually hit the beaches before dawn, so as to be in a position to move inland before the defenders became aware of their presence and launched a counter-attack. Infantry units were relied on to seize a beach-head, and ordinarily no artillery or tanks went ashore with the first wave. At Kota Bharu and at Corregidor, tanks and artillery were brought ashore in the second Japa-

nese wave. Here again the accent is on speed and mobility, and the importance of achieving surprise.

The tactical weaknesses of Japanese amphibious techniques are readily apparent. Landing operations performed in the face of natural hazards such as rough water and darkness mean loss of life. Casualties were frequently excessive—even on Wake Island when no fortifications were involved. In action, Japanese performance often lacked distinction.

Yet, it is absurd to declare Japanese amphibious concepts unsound. That they succeeded should be self-evident.

US MC



YOUR OTHER RIGHT !

SECTION V, "GUARD MOUNTING," Chapter 5 of the *Landing Party Manual* states, in part . . .

The guard, if armed with the rifle, is brought to the right shoulder at the first note of Adjutant's Call and marched in column in quick time to the parade ground by the senior petty officer.

The manual also states "Immediately following Adjutant's Call the band plays march music; the adjutant, with the sergeant major on his left, marches, *at the first note of march music*, to a position in front of the place where the center of the guard will be."

You will note that the manual does not specifically state that the guard will move off on the first note of march music, but inasmuch as the adjutant and the sergeant major have received the "word" we will assume that everybody goes when the whistle blows. Well, here's where the SNAFU comes in!

The adjutant and the sergeant major generally get off with a minimum of shuffling, but the poor senior NCO and his guard wind up like a slow starting conga line and come gloriously up onto line out of step with the band. Having breached the purgatory of the first note of march music, the guard mount settles down

as a smart, well disciplined, faultlessly commanded body of troops going about their business. So, what causes all this confusion about a bugle call? Faulty instruction? Could be, but we do know that the manual *does not* show you how to do it, so there goes the old gag "let's break out the book."

Many sergeants will indignantly tell you, "I ain't no Music." Too many NCOs are not familiar with the tune of Adjutant's Call. To most of them it is just that noise the Musics make before the guard marches on. The few NCOs who do manage to get the guard off on the first note of march music are considered to be the kind that fall down in a rice paddy and come up smelling like Chanel No. 5. We all know that luck is not a constant factor, so let's do the manual one better and try to show the NCOs just *how* to step off on the first note of march music.

As any bandsman will tell you, the tune of Adjutant's Call is an eight-beat, repeated strain (no pun intended). In other words, the call itself lasts for sixteen beats. Now, if Adjutant's Call is sixteen beats in duration, we will correctly assume that the first note of march music will commence on the seventeenth beat or count.

Before we continue, and primarily for the benefit of those of you who cut your music appreciation classes, permit us to delineate this count and beat business. Cadence is a term with which we are all familiar. The correct marching cadence as we know it is 120 paces per minute; cadence and beat count are all the same except that the musicians call it tempo and DIs call it cadence.

The bass drummer in the band is whamming that cowhide 120 times per minute while you're placing one of your two feet ahead of you 120 times per minute. So you see, your cadence and the band's beat are identical. Unfortunately, your synchronization may be cockeyed and even though you are placing your feet down simultaneously with the beating of the bass drum, you're out of step with the band. How come?

Well, the band starts playing the same way you start marching, i.e., the first beat of the drum is the left foot beat and every other beat thereafter belongs to the left foot. Some tender hearted bass drummers have been known to accent the left foot beat for the benefit of those poor marchers with no ear for music. So much for the beat and count business; our main purpose is to get that

That's march music the band's playing, not a hesitation waltz.

Get your chargers off on the left foot and they'll stay in step



guard off on the seventeenth count after the first note of Adjutant's Call. The easiest way out is to have the sergeant of the guard give the command "MARCH" on the sixteenth count, which is also the last beat of Adjutant's Call. But we already have him giving the command, "Right shoulder arms" on the first note of the call.

Looks like a tight schedule, but with the right instruction it's a cinch.

For the purpose of this instruction you will need a chart which can be made by anyone capable of drawing a straight line. First, print the numbers one to sixteen large enough to be seen by the average NCO school class and underneath the figures as shown below, print the two commands as they would be given in cadence:

1	2	3	4
RIGHT	SHOUL	- DER	AHMS
(E X E C U T I O N)			
5	6	7	8
9	10	11	12
(P A U S E)			
13	14	15	16
FOR	- WAHD	(PAUSE)	MAHCH

The class will now come to order. The figure "one" is the first note of Adjutant's Call and the band hits that note when the Drum Major brings down his baton. The sergeant of the guard will watch that baton just as closely as any member of the band. When the baton comes down he will shout, "RIGHT shoul-der ARMS!" in cadence with the band.

As shown by the chart, this will take four beats of Adjutant's Call. The execution of the command will take four more beats which puts us exactly half way through the call. We coast for four more beats just to make it look easy and then on counts thirteen and fourteen we command in cadence, "FOR-WARD," pause on fifteen and then "MARCH" on the sixteenth. Just a little practice and you've got it made.

US MC

By MSgt G. P. Finn

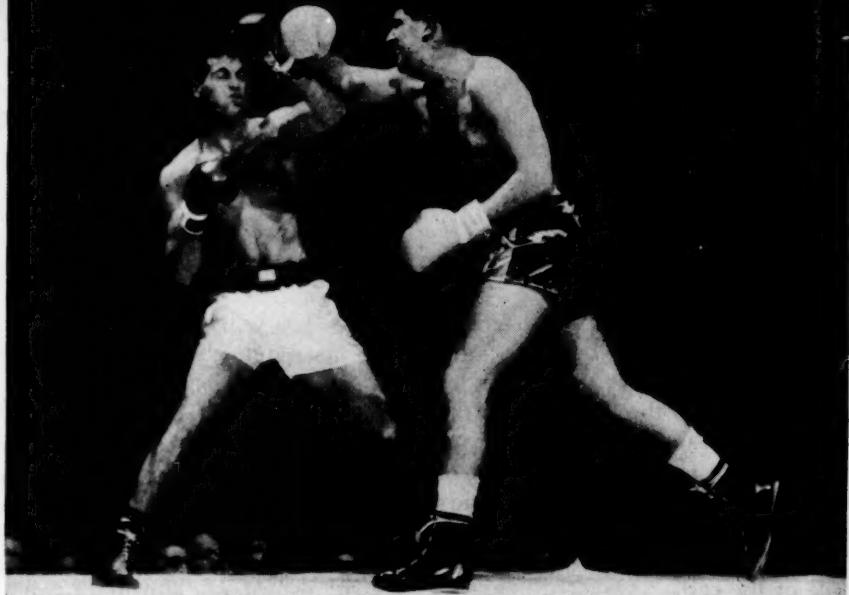


in brief

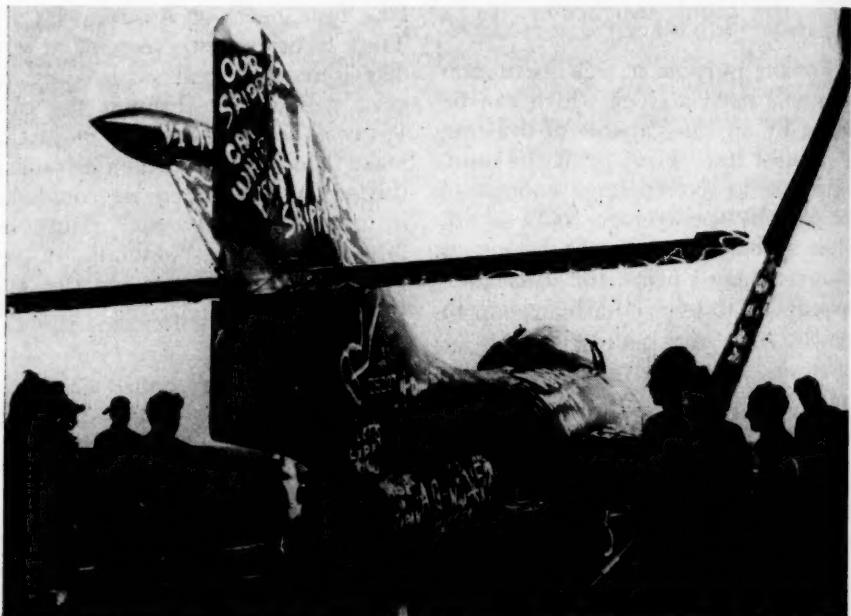
Quantico Marine Pfc Leonard Kanthal (right, in black trunks), slugs his way to a TKO over Leroy Duchene to become the National Golden Gloves Heavyweight Champion at Madison Square Garden. Kanthal, a native of Washington, D. C., was a deciding factor in giving the East Team its first victory in nine years over the west. The 6'2", 200-pound Leatherneck won going away after being runner-up in the same event in 1953.

*A don't for carrier based pilots—DON'T make a landing on a carrier other than your own, or this can happen to you (right). A Panther jet from the carrier USS *Boxer* recently landed aboard the carrier USS *Yorktown* in the Sea of Japan. After finishing repairs, the *Yorktown*'s crew white-washed a few choice words on the "furriner" before sending it back. One choice phrase, "our skipper can whip your skipper" was plastered on the rudder.*

Through salvage recovery and collecting excessive equipment, the 1st Mar Div saved four million dollars in eight months under the cost consciousness program conducted within the Eighth Army in Korea.



Wide World



The Quantico pistol team outshot a stubborn Fort Knox team to cop the Flamingo Open Pistol Championships at Coral Gables, Fla. recently. Captain Victor F. Brown (left) shows teammate MSgt Maxim R. Beebe a perfect-score target he shot. The Quantico team also took five other first place honors.

Water in mortar tubes may cause rounds to fall short, according to results of tests conducted at the Aberdeen Proving Grounds. At elevation angles which normally give about 750 yards range, one ounce of water caused rounds to fall 40-70 yards short. In some instances with five ounces of water in the tube, rounds were projected only 15-20 yards total flight. Heavy oil lubricant in the tube will also shorten the range.



Companies B and C of the 1st Tank Bn, 1st Mar Div, have been awarded the Army Distinguished Unit Citation for "outstanding performance of duty and extraordinary heroism in action during the period 28-29 May 1953."

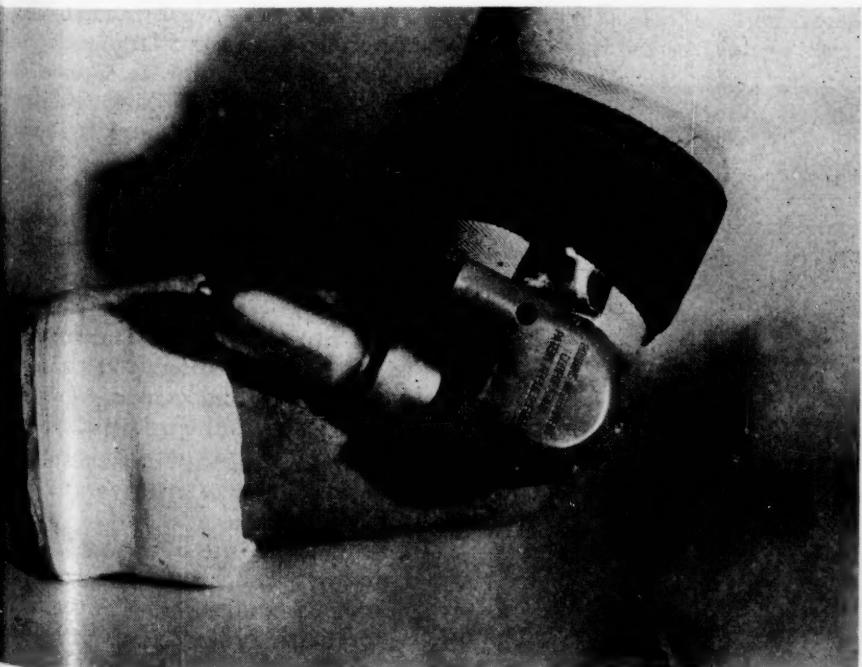
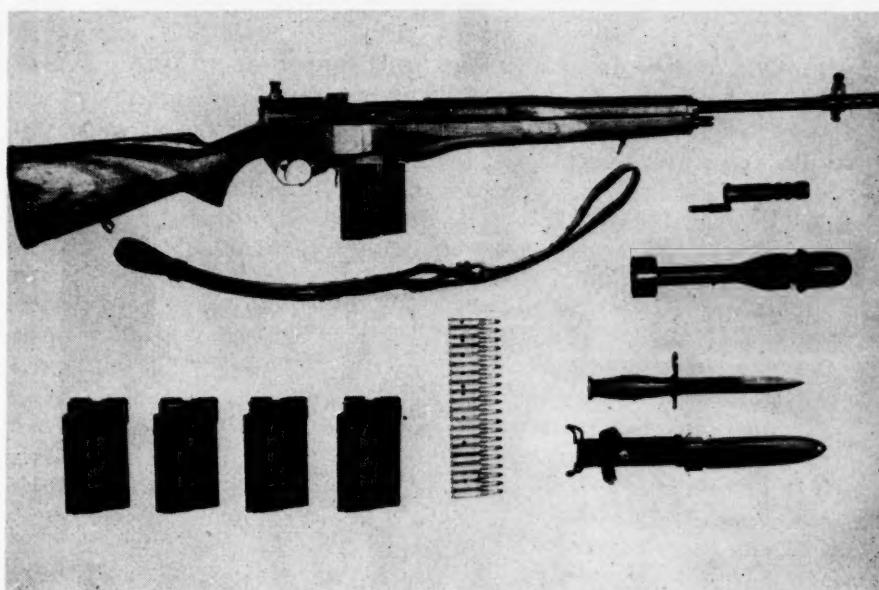
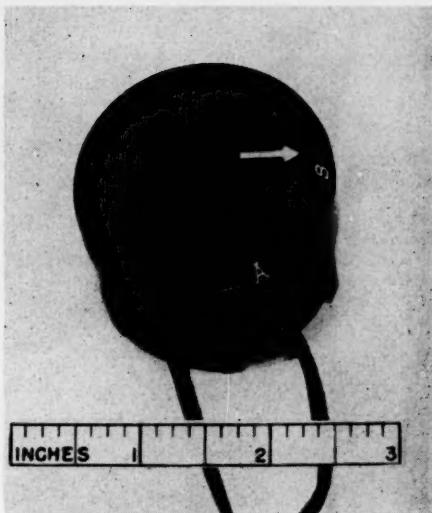
The "singleness of purpose and magnificent fighting spirit exhibited in the battles of outposts 'Elko,' 'Carson' and 'Vegas' while attached to the Third Turkish Brigade resulted in the frustration of enemy plans to breach the main line of resistance" the citation reads. The location of these outposts was on the Western Front, just north of the Imjin River.

The only other Marine units to receive the Army decoration are: The 4th Marines (March-April 1942, Bataan and Philippines), VMF 541 (December 1944, Philippines) and the 1st MAW (November-December 1950, Chosin Reservoir).

The Army is presently experimenting with the new T-47 light-weight rifle, caliber 30, (right). The T-47's bolt action has been compared to that of the Browning Automatic Rifle. Each rifle is equipped with a grenade launcher, a bayonet and BAR type magazines.

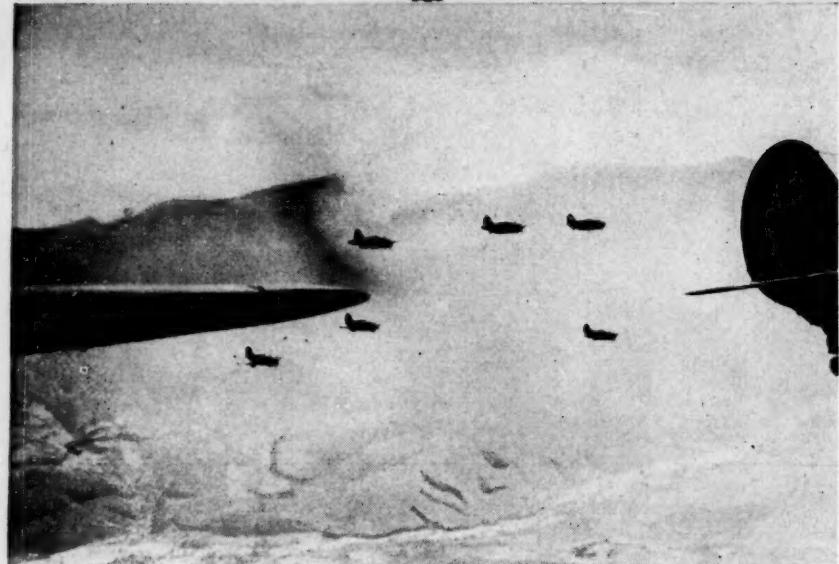
Weighing only four-and-a-half ounces, yet packing the wallop of its nine-pound WW II predecessor, the new anti-personnel mine (right), costs only one-fifth as much as the old type. Designated the M-14, it is so small it may be carried in the palm of the hand.

Camp Matthews at MCRD, San Diego recently initiated a new \$60,000 "push-button" pistol range. Entirely run by electricity, a timing mechanism regulates the movement of the targets so that competitive meets can be run smoothly. It was built according to National Rifle Association specifications.



The Navy is currently testing crew reaction to soluble coffee aboard 12 ships. The instant type coffee is cheaper, easier to prepare and less bulky than the bean type. Questionnaires will be obtained at the end of three months to determine whether or not the "joe-pot" gets the deep-six.

A completely new type of tourniquet, weighing only 15 ounces, that automatically and instantly stops the flow of blood and maintains a regulated pressure, (left), was put on the market recently. The tourniquet, which can be easily self-applied, inflates the cuff and exerts a uniform squeeze to stop the flow of blood. No probing for pressure points is necessary and injury of cell tissue is greatly minimized.



Wide World



Wide World

By Col J. C. Murray

the Anti-B

Conclusion

AIR FORCES

ON 10 AUGUST 1949 THE ARMY launched its long-awaited attack in the Vitsi area. From the first, light aircraft were over the area searching for, and attacking targets in assisting the ground advance. By nightfall 169 sorties had been flown, higher by 63 than any other day in the war. The average daily sortie rate during the five days of the Vitsi operation was 126.

Again on 24 August, when the Army started the last large-scale attack of the war in the Mt. Grammos area, air was active. Following a day of sustained air operations by Spitfires and C-47 converted bombers, the newly formed Helldiver (SB2C) Squadron, flying an 18-plane formation, made its debut in combat. During the period 24 to 29 August, planes supported the Grammos attack with 826 sorties. During the six-day period perhaps 250 tons of bombs, rockets and napalm were delivered against the guerrillas.

The victory in Vitsi was a result of the effectiveness of artillery and air support and to a piece of unexpected luck in the unopposed occupation of a key terrain feature by a group of Commandos. The participation of air in the Grammos battle

was no less effective. While these two instances are not representative of the air effort throughout the anti-bandit war, they do afford at one time a useful measure of what was accomplished and an indication of what might have been accomplished.

Air in support of ground forces

It is a truism today that successful ground operations cannot be conducted without air superiority. But air superiority alone merely frees ground forces from the effects of enemy air action. This favorable

where a new Greek Air Force came into being. The Hellenic Bomber Squadron was employed, as a part of the RAF, primarily in long range patrols in the Mediterranean. The Greek Air Force was not prepared by its wartime experience for its role in the anti-guerrilla war.

Until late 1946 operational control of the Greek Air Force remained under the RAF, while administrative control was exercised by the Greek Air Staff. When it became necessary to employ the Air Force against the bandits, the RAF relin-

quished operational control. This forced a reorganization of the Air Force. At this time it consisted of 58 obsolete aircraft and approximately 291 pilots (all veterans of war service; no pilot training had been undertaken since the liberation).

An order was placed with the UK for 250 war-surplus aircraft. Delivery was expedited because of the bandit war and was completed during the summer of 1947. This order included Spitfire fighters, Wellington bombers, C-47 transports and liaison craft. The Wellington bomber was found to be inoperable in Greece, and they were grounded.

The middle of 1947 then, found the RHAf with a strength of about 5,000, of which 400 were flying personnel. Its units were: two fighter squadrons of Spitfires, one liaison squadron of Harvards (T-6), Austers and L-5s, one transport squadron of C-47s and Ansons, one refresher flight of Spitfires and other types, and one projected fighter squadron.

Aircraft on hand were sufficient to support these squadrons; training of pilots had been resumed and some 50 cadets had just completed advanced training in England. Schools were established to train pilots, mechanics and electrical, hydraulic, airframe and signal technicians. Training was conducted under the supervision of the RAF Delegation, consisting of 15 officers and 130 men. It was at this juncture that the U. S.

aid program was instituted.

Pattern of air action

By this time the pattern of air action was developing. Air operations against the guerrillas were of two general types. The first consisted of air operations aimed at "isolation of the battlefield." However, all Greece was a battlefield and the objective of such operations was simply the destruction of guerrilla forces. The second type of air action was direct support of ground troops. Three techniques were employed

The defeat of the guerrillas was made possible by their departure from proper guerrilla organization, and by so doing, they opposed weakness to strength

condition can be exploited fully only if the air has the capability of effectively supporting the ground forces. No one questions the necessity of achieving air superiority nor the value of interdiction. However, at such time, when aircraft can be employed most effectively in the direct support, there must be an effective technique for the delivery of such support.

In Greece the infantryman paid the forfeit for past neglect of the close support problem. There was no aerial war. Control of the air was achieved by default. The primary—indeed the only task of the Royal Hellenic Air Force—was the attack of ground targets either independently or in conjunction with ground units. While independent attacks were of great value, there were many occasions when aircraft could have been employed most advantageously in direct support of ground troops. Destruction of guerrillas by any and all means was the objective, and the air effort must be evaluated in this light. Was the air effort, complete with its manpower and material problems, warranted by the results? In seeking the answers, familiarity with the background of the RHAf is essential.

History and composition of RHAf

Following the Allied withdrawal from Greece in 1941, many Greek airmen made their way to Egypt

in conducting the first type of operations. First, there were pre-planned strikes on targets located in advance by ground intelligence or by aerial photography. The second, armed reconnaissance, was normally conducted only when information indicated the probability of finding a profitable target, as when a large enemy formation was known to be on the march in a given locality. The third technique, and the one most commonly employed, was to locate targets by the employment of reconnaissance aircraft. These remained on station until the arrival of strike aircraft to guide them onto the target.

Independent air operations

A high percentage of the total air effort went into attacks of this type. They were delivered against troops on the march, in bivouac or in concentrations for attack or defense. They were delivered against bandit headquarters, bandit-held towns, supply installations and defensive positions. They harassed his concentrations and punished his forces during withdrawal from action. The only limiting factors to this independent air campaign were the availability of pilots, suitable aircraft and the difficulty of target identification. These operations were being conducted over Greece, not hostile territory,

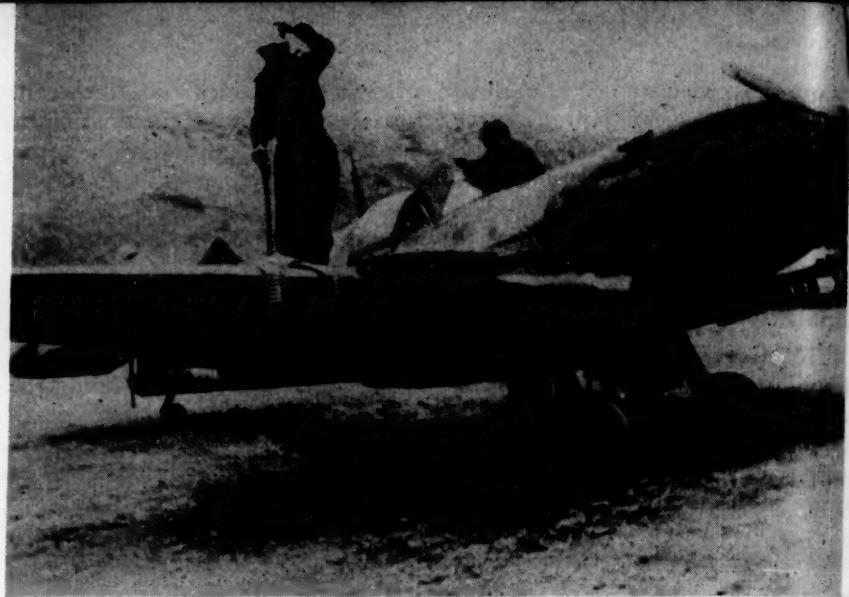
and everything that moved could not be attacked. Occasionally, too, Army units and harmless non-combatants were attacked, but the number of legitimate targets was great and a much greater effort in the air to locate and attack such targets would still have paid dividends.

Troop support operations

Direct support took many forms. It included command liaison, tactical reconnaissance, air observation, air spot for artillery, aerial photography, aerial resupply, the dropping of propaganda leaflets and the attack of targets in conjunction with the ground forces. The last named was, of course, the most important. The importance of direct air support was enhanced by the limited allocation of artillery and mortars, by the nature of the terrain which often prevented the employment of artillery, and by the fact that the bandits did not stand their ground, but sought to withdraw from action by movement. The provision of mountain artillery improved fire support in mountain operations but there persisted in Greece a need for "flying artillery" such as seldom has been experienced elsewhere. Given properly trained pilots, suitable aircraft, air-ground coordination and communications, the opportunities for profitable employment of aircraft in direct support would have been myriad.

General effectiveness of air effort

The record of RHAf operations during the war leads to the conclusion that the return from the air



Spitfires: not designed for ground support

INP

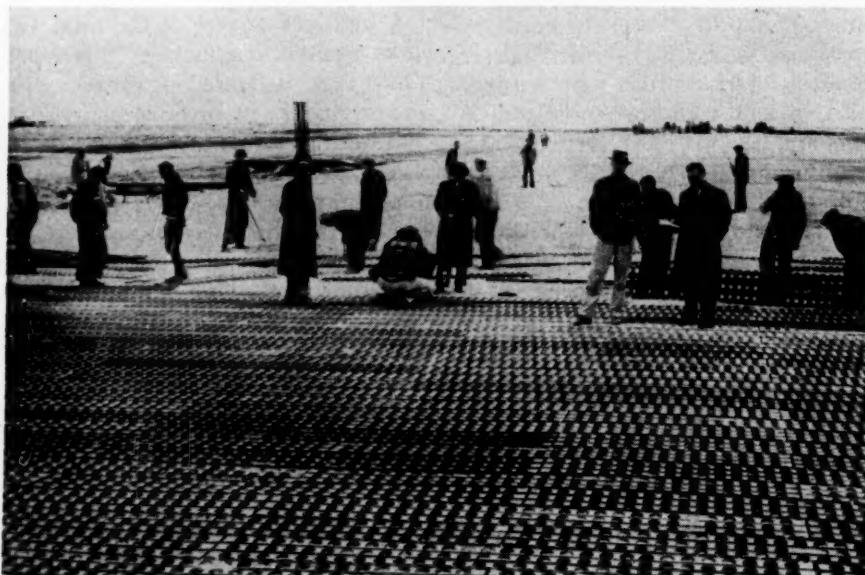
effort immeasurably exceeded the return from any comparable effort on the ground. Its manpower cost ranged from a minimum of 5,000 to a maximum of 7,500, as compared to a minimum of 120,000 and a maximum of 150,000 in regular Army units alone. Moreover, casualties sustained in the air were infinitesimal as compared with those sustained on the ground.

The financial cost of air operations in Greece cannot be regarded as representative of the cost of such operations generally, since low-cost, surplus aircraft and equipment were employed. Thereby, the cost of air operations was only a fraction of the cost of ground operations, probably less than ten percent.

Weaknesses of RHAf

The basic weakness of the Greek

New aircraft required new facilities



Air Force, when it was called upon to enter the anti-bandit war, was that it did not have an adequate nucleus for expansion. Little had been done since the liberation to reconstitute an effective Air Force. This might easily be attributed to inefficiency in the RHAf or in RAF conduct of its affairs. Certainly the state of development of the Air Force was not comparable with that of either the Army or the Navy. This explanation is too simple and overlooks certain fundamentals of the Greek situation. Greece is a poor country. It has neither the industrial capacity to build aircraft nor the foreign exchange to buy them. It could not maintain a modern air force without assistance. From the liberation to the outbreak of the bandit war the UK had aided the legal Greek Government, but Britain's resources were slim. The need to rebuild the Gendarmerie and the Army to preserve order was clear, but full-scale hostilities in which aircraft would be employed could hardly have been foreseen even by the most pessimistic. Consequently, the problem of the Air Force had not been regarded as pressing.

The failure to assign any priority to the rebuilding of the Air Force was the source of its many later weaknesses. Among these was the absence of aggressive leadership. This, in turn, may have been responsible for Communist infiltration into the Air Force, which extended to the point of sabotaging its aircraft. Equally serious were shortages in aircraft, pilots, maintenance personnel, spare parts, equipment and facilities.



Wide World

Guerrillas, haggard and harassed — the tables had turned

Such shortages had, in Greece, a greater significance than they might have had in a more highly industrialized country where skilled personnel might have been drafted from industry and where industry could have supplied the needed facilities and equipment. Not so in Greece. Industry could supply few of the skills required by the Air Force. Aircraft technicians had to be trained and the average recruit had had little previous experience which would aid in converting him into a technical specialist. Even the construction of airfields exceeded the capacity of the post-war economy of Greece. Little could be done with respect to the procurement of equipment and the development of facilities except through the British Mission.

Unfortunately, the need for air power coincided in time with the British Government's discovery that it could no longer bear the financial burden of aiding Greece. A program of aircraft procurement was initiated and supported until the U. S. could take over the responsibility. While it was an adequate initial program so far as numbers of aircraft were concerned, the spare parts program did not discount sufficiently the maintenance capabilities of the RHAf and the air effort soon suffered as a result.

U. S. assumption of financial responsibility, nine months after the end of British aid, did not result in any bold new air program. The responsibility for the organization and training of the RHAf (which implies the acceptance of a high degree of

responsibility for its performance in battle) remained for the most part with the RAF Delegation, whereas the responsibility for providing the means was vested in the American Mission. A similar arrangement was found to be satisfactory as regards the Navy where the prior provision by the British of long-life capital items was the dominant consideration. As regards the Air Force, however, a service where material is a paramount consideration and where equipment consists of relatively complicated and short-lived items, it is unsound to separate responsibility for performance in battle from control of the material means to improve that performance. The RAF Delegation was in the unfortunate position of being responsible for the operating efficiency of the RHAf, while the U. S. Mission was in a position to monitor any recommendation for its improvement entailing the expenditure of funds. This expresses the relationship in the worst possible terms and may be misleading. The fact remains that indecision and half-measures are inherent in any such division of responsibility.

Some of the factors which militated against getting maximum return from the air effort have been enumerated above. They included lack of aggressive leadership, Communist infiltration, separation of responsibility from control of the means to accomplish the mission and the inadequacy of the existing nucleus to effect a rapid and efficient expansion. The last named comprised a host of shortages of all

kinds: pilots, technicians, facilities, equipment and know-how. There were additional contributory factors, among which were: (1) the limited suitability of aircraft, (2) the absence of effective techniques, and (3) limited comprehension of the capabilities of close support aircraft.

Limited suitability of aircraft

Except for the C-47 converted bomber, the Spitfire was the only aircraft available for the attack of ground targets until just five days before the war was terminated in the second Grammos battle. It was then that the SB2C made its debut. This event presaged a vast improvement in the effectiveness of air operations just as the curtain dropped.

Forty-nine SB2Cs were purchased from surplus stocks of the U. S. Navy. A comparison of the characteristics of this aircraft and the Spitfire indicates how fortuitous this development was. The Spitfire had limited endurance, limited ammunition capacity, limited ability to locate the target and greater vulnerability to ground fire. While the SB2C was equipped with dive brakes, enabling it to make a steep-angled dive attack and a structural design which permitted high-angle rocket firing and strafing, the Spitfire had limited ability to attack a ground target at an effective altitude and in an effective angle of glide. The SB2C had an additional advantage in its low stall speed and in its ability to take off and land on short runways.

From this brief comparison it is apparent that a much higher return could have been obtained from the air effort had a more suitable type been available to the RHAf earlier.

Conspicuous by its absence from the arsenal of the RHAf was the light bomber. In August 1948, the RHAf converted a certain number of C-47s into bombers. Obviously, it could not equal in performance a plane designed for this purpose.

Air-ground technique

The rudimentary character of the air support technique in use at the time was disclosed in the Romeli operation in April and May 1948. In that operation, in which three divisions and supporting troops, as well as some Commando and NDC units, were employed over many hundreds of square miles of area, only

five mule-pack radios capable of contacting support aircraft were available to the ground units. These were employed not with the assault battalions, but at brigade and division headquarters. Vehicle-mounted radios were of little or no value since they were roadbound. Under these circumstances, it is not strange that poor communications and poor means of identifying targets and friendly troops frequently nullified the effort.

This was more than a deficiency in communications. It is an indication of the lack of understanding of commanders, on the ground and in the air alike, of the capabilities of the air weapon. It gives evidence that the existing air potential was not being fully developed. Moreover, so long as this condition remained there was little chance that the advantage of more extensive exploitation of the guerrillas' greatest weakness by a greater effort in the air would be realized.

It was late in 1948 before the more obvious defects in this situation had been corrected. Mule-pack air support signal units were more widely distributed. But even then the basis of distribution, one per brigade, with a spare at the division headquarters, was inadequate. Failure to provide air support signal units to the Commando groups prior to the spring of 1949, or to accept an extension of the mission of the raiding forces, seems to add to the evidence that the air potential was not fully appreciated.

The Commando groups had been organized as anti-guerrilla forces. They were employed, however, in missions which scarcely justified the maintenance of special units. The British Mission advocated that they be reorganized as pursuit forces to range widely and rapidly through the mountainous country in pursuit of the elusive guerrilla. They were to be air supported, air supplied and, insofar as practicable, airborne and air transported.

The union of the capabilities of tactical air with those of the raiding forces would have multiplied their effectiveness. Such a union might well have produced the most effective synthesis of means for conducting nearly all phases of the anti-guerrilla war, except the deliberate attack of fortified areas.

Summary

There was a significant failure to visualize the possibilities which lay in fuller exploitation of the greatest weakness of the guerrilla — his lack of air and any positive means to combat it. Faulty techniques were endured because of this failure as were also poor maintenance, the continued use of aircraft of limited suitability and all the other factors which robbed Greece of a full return on its investment in the air. It was this failure, too, which prevented the allocation to the air of a greater portion of the total effort.

In making this judgment today it must be kept in mind that the planning for the anti-guerrilla war consisted of a succession of three annual campaign plans, each of which was

tween 1946 and 1949. Starting from almost nothing, the Air Force developed to the point where it could deliver effective support. Although the number of sorties flown and the number of tons of bombs dropped do not in themselves indicate the effectiveness of air support, genuine progress had been made in other aspects. This increased effectiveness of the RHAf was one of the decisive factors in the Vitsi and Grammos battles.

NAVAL FORCES

Pattern of naval operations in the anti-guerrilla war

There was no war at sea during the guerrilla uprising. However, no corresponding number of men contributed more to the ultimate vic-



Wide World

Army raiding parties . . . supported by RHN

expected to be conclusive. This, coupled with the fact that aid funds were appropriated on an annual basis with limited assurance of further commitments, did not promote long-term planning. Any substantial increase in the size or improvement in the effectiveness of the Air Force could not have been effected within the span of a few months. Had the ultimate extent and duration of hostilities been foreseen when the bandits first became active in 1946 or in 1947, planning for the Air Force might have been approached in a different manner.

The foregoing discussion in no way denies the great advances in the effectiveness of the Air Force be-

tory than those of the Royal Hellenic Navy. Its role was not a dramatic one. On an average of about four times a week, ships were called upon to deliver gunfire ashore to assist in the defense of a beleaguered coastal village or to support an Army unit operating near the coast. Ofttimes guerrillas would steal or capture a caique and it would be necessary for the Navy to go in pursuit of it. Sometimes a naval landing party would be put ashore to investigate reported guerrilla activity. Frequently, Army raiding parties were embarked and landed to make such searches or to make ancillary landings in conjunction with larger operations ashore. On one occasion



Reconstruction: sabotage had taken its toll

the Navy was called upon to participate in a large-scale amphibious landing. The day-to-day duties of the RHN were the patrolling of Grecian waters and the provision of sea transport for the movement of troops and supplies. Thus the Navy maintained control of the seas surrounding Greece, denying those waters to the guerrillas. By providing sea transport it assisted in the full exploitation of the advantages which accrued to the Government through its command of the sea.

Recent history, size and composition of the Royal Hellenic Navy

The Navy at the inception of hostilities was in better shape than either the Army or the Air Force. Unlike them, it had been able to withdraw most of its forces when Greece fell to the Germans. Thus it had, on its return to Greece with the exile government, a good nucleus of experienced officers and ratings. The wartime tie with the Royal Navy was maintained. A British Naval Mission was established in Greece and the UK loaned Greece enough ships to meet its requirements; later, additional ships, particularly amphibious types. These ships were hardly first line and their upkeep required continuous maintenance—a serious disadvantage since the Germans had sabotaged the repair facilities of the Navy on their withdrawal from Greece. The ships,

nevertheless, were adequate for their use during the anti-bandit war. The number of personnel allocated to the Navy was not great, but it was adequate. Up until the time the U. S. took over its logistical support the strength of the RHN was about 12,000. In early 1948 this was increased from 12,000 to 13,500 in order to permit an increase of patrolling and number of ships available for the transporting of troops and supplies.

Value of control of sea communications

The advantages the Government enjoyed through its monopoly of naval power were of great significance, for Greece is distinctly maritime. Except for its long, northern frontier it is insular. Its highly indented coastline is nearly 2,000 miles in length, and no inland point is more than 75 miles from the sea. It is bisected by the Gulf of Corinth which makes the Peloponnesus, south of the Gulf, an island by itself. The Grecian islands, moreover, constitute a substantial portion of the total territory. Because of its maritime character, and because of its poor land communications, the sea has been especially important to transportation and communications in Greece. The widespread use of sea transportation, in turn, has resulted in the neglect of land communications to such an extent that even be-

fore World War II no significant military operations could have been conducted without recourse to the sea.

During the occupation the rail and road systems, such as they were, were rendered useless by sabotage. Repairs had scarcely begun before the more extensive program of sabotage sponsored by the guerrillas was inaugurated. Under these circumstances control of the waters surrounding Greece afforded an almost decisive advantage. In concrete terms it meant that the government could move its troops and supplies freely from one part of Greece to another, which gave it great strategic mobility. The "Democratic Army," on the other hand, was restricted to land transport and was denied strategic mobility.

It may be said that the factor of command of the sea has been assigned too much importance, since the guerrillas had no naval capability. True, but it was because that capability was denied them by the Navy. Save for the Navy, the guerrillas could have gained and exercised a limited control of the sea lanes. That they could get possession of any of the hundreds of caiques which ply the waters surrounding Greece was often demonstrated. Had they been able to operate those vessels, the course of the war would have been very different. Instances of attempts to use vessels from Albania for supply purposes occurred in the Peloponnesus in September 1948. Had there been no restraining influence in the form of a Greek Navy, it is even possible that armed vessels might have found their way into guerrilla hands.

Patrolling was carried out to enforce shipping and sailing regulations, and suspicious vessels were taken into custody for investigation.

Some of the specific objectives of patrolling directed against the guerrillas were: (1) Preventing escape (2) Preventing reinforcement (3) Preventing resupply (4) Preventing reinfestation of cleared areas (5) Isolating guerrilla concentrations (6) Keeping the Communist virus from spreading to areas which had not been affected previously by preventing the movement of agents and organizers (7) Guarding the islands around Greece on which prisoners of war were interned.

United States assistance to RHN

Since the Greek Navy was meeting its operational requirements with the equipment then on hand, the U. S. Naval Group, upon its arrival in Greece in the summer of 1947, deduced that its mission could be fulfilled by providing the minimum support. An exception to this policy was made in the case of six patrol craft procured from U. S. naval surpluses to permit an extension of patrolling. The Navy Group sponsored the repair and construction of the facilities of the damaged Naval Base at Salamis Island, as these were required to enable the Navy to keep its ships operating. Assistance was given to the development of training facilities at Sacaramanga which were required in order to bring training standards to an acceptable level.

As a result of this policy to limit expenditures, the end of the war found the Greek Navy with no better equipment than it had started with, whereas both the Army and the Air Force had, for all practical purposes, been completely re-equipped.

CONCLUSIONS

On the political, psychological and economic fronts, factors which contributed to the defeat of the guerrillas were:

1. The British and U. S. Programs of aid to Greece

The presence of British troops in Greece at the onset of guerrilla operations exercised a restraining influence on the USSR and the satellites, preventing direct intervention in Greece and open aid to the guerrillas. U. S. participation strengthened this restraining influence. The British and American aid programs sustained the government of Greece and enabled it to mobilize, equip and supply large military forces, while at the same time staving off the collapse of the national economy.

American interest, moreover, tended to fill the vacuum when UK alone could no longer provide support on the required scale. American assistance was provided on such a scale as to improve the morale of the Greek nation by giving it hope that peace might be restored and that a degree of economic stability might be once again achieved.

2. The Tito-Cominform rift

Yugoslavia held a pivotal geographical position among the three satellite countries along Greece's northern frontier. Yugoslav Communism quite naturally, therefore, had taken the lead in the Cominform-directed aggression against Greece. The Tito-Cominform rift broke down the mechanism established to provide support to the guerrillas and resulted in a division within the leadership of the guerrillas. Although this division was resolved in favor of the Cominform, the rift tended to deprive the guerrilla movement of the conviction of immediate purposefulness. Moreover, the establishment of a new mechanism for providing assistance to the guerrillas was scarcely practicable owing to the key geographical position of Yugoslavia. The full implications of the Tito-Cominform rift were not felt immediately, but were experienced progressively from the fall of 1948 until July 1949, at which time the Greek-Yugoslav border was closed by order of Tito.

The Tito-Cominform rift was, to some extent, a product of British and American aid to Greece. Had Tito felt that the guerrillas could win in Greece with attendant encirclement of Yugoslavia by Communist governments, it is doubtful that he would have had the courage to stand his ground in the dispute with the Cominform. Thus the Tito-Cominform rift which aided Greece in the anti-bandit war was itself, to a certain extent, a by-product of British and American aid, particularly the latter.

On the military front, factors contributing to the defeat of the guerrillas were:

The appointment of General Papagos as Commander in Chief of the Government Forces

The appointment of General Papagos resulted in the fuller development of the combat potential of the Greek Armed Forces. By the relief and dismissal of unsuitable commanders and by emphasizing continuous, aggressive offensive operations against the guerrillas, General Papagos used the existing military forces more effectively. There was no increase in the numerical strength of the armed forces during his tenure. It was simply that the

forces, as they existed, were used more effectively. Continuous pressure kept the guerrillas on the move, inflicted heavy casualties and afforded them no opportunity to resupply or replace casualties. Thus, their relative combat power gradually declined during the six months period which preceded their final collapse.

The Papagos appointment brought the planning and advisory function of the U. S. and British Missions into their own as factors contributing to the victory.

The Tito-Cominform rift

The Tito-Cominform rift reduced the amount of military aid available to the guerrillas. By January 1949 supplies furnished through Yugoslavia had fallen off to a mere trickle. There are indications that small arms and artillery ammunition may have gone into short supply prior to the final collapse of the guerrilla operations. The final blow to the guerrillas which resulted from this rift was the closing of the Greek-Yugoslav frontier in July 1949. This deprived the guerrillas of the effective use of approximately 30 percent of their fighters and denied them the use of the regions north of the frontier as a protected maneuver area. Supply shortages and manpower losses resulting from the Tito-Cominform rift may justify its identification as the proximate cause of the guerrilla collapse.

The partial abandonment of guerrilla tactics by the "Democratic Army"

The tendency of the "Democratic Army" during 1948 and 1949 towards a military strategy, which depended for its success upon the organization of larger formations and the employment of orthodox military tactics, implied a growing reliance upon military force alone. Under the existing conditions, any such development played into the hands of the government forces. The guerrillas were opposing weakness to strength. The decisive defeat of the guerrillas was made possible by their departure from proper guerrilla organization and tactics in their effort to defend the base areas along the northern frontier and the gathering of their one-time small bands into larger formations ranging in size up to the division.

USMC



Bendix jet ignition systems ...

streamlined for maximum efficiency!

Although jet ignition is a comparatively new development in the fifty year span of powered flight, progress in this vital phase of aviation has been truly remarkable.

Unlike ignition design for reciprocating engines, which has remained relatively constant, jet ignition has gone through several major design changes within the past few years.

For example, a comparison of the TLN-10 jet ignition system, produced by the Scintilla Division of Bendix, with earlier designs shows significant improvements in every operating characteristic—and at the same time original cost, operating expense and weight are substantially reduced.

Here, indeed, in the Scintilla TLN-10 jet ignition system, is a classic example of how the present national policy of greater value for the taxpayer's dollar is being put into practice.

SCINTILLA DIVISION OF Bendix

AVIATION CORPORATION

SIDNEY, NEW YORK

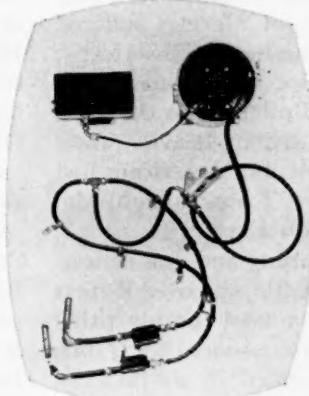
Export Sales: Bendix International Division,
205 East 42nd St., New York 17, N. Y.

FACTORY BRANCH OFFICES: 117 E. Providencia Ave., Burbank, Calif. • Brouwer Bldg., 176 W. Wisconsin Ave., Milwaukee, Wisc. • Stephenson Bldg., 6560 Cass Ave., Detroit 2, Mich. • 512 West Ave., Jenkintown, Pa. • 8401 Cedar Springs Rd., Dallas 19, Texas • American Bldg., 4 S. Main St., Dayton 2, Ohio

TLN-10 SYSTEM

WEIGHT 7 LBS.

- Lower Cost—Simplified Service—Weight Reduction—Requires less current.
- Higher wattage available at igniter plug—Improved starting over entire range of operation—Virtual elimination of plug fouling difficulties.
- The TLN uses low voltage only and eliminates problems encountered with production and control of high voltage, such as dielectric losses, corona, capacitance loading, and flashover.
- Smaller size—Easier installation—Leads used will withstand exceptionally high temperatures—TLN-10 System is engine mounted whereas TEN-1 was both plane and engine mounted.



**EARLY
DESIGN**

WEIGHT 37 LBS.

passing in review

A Few Acres . . .

TARAWA—Robert Sherrod. 183 pages, illustrated. New York: Duel, Sloan & Pearce. \$3.50

Tarawa was the first landing in the Central Pacific Campaign. It was the first major assault against a heavily defended beach area and it marked the first use of LVTs as as-

days, lived an experience reserved for few men. This short book appeared in 1944 and told the people in simple, direct language what an assault landing was like. The book spoke not of tactics, plans or strategy, but of men. It spoke of courage and sacrifice and fear. It spoke of emotions the intensity and variety of which are seldom felt by individuals.

bombed in Port Moresby, met the Japanese soldier at Attu and had seen the invasion at Kiska. At Tarawa he wrote a vivid personal account of the battle. There was no "after action" editing; no pseudogloryification of an event. He wrote of what he saw, heard and felt. Those who remember Tarawa or other and later beachheads will recognize the ring of truth in Sherrod's words.

Reviewed by LtCol V. J. Croiset

He Died a Millionaire . . .

THE STORY OF COLT'S REVOLVER: The Biography Of COL. Samuel Colt—William B. Edwards. 470 pages, Illustrated. Harrisburg, Pa. The Stackpole Co. \$10.00

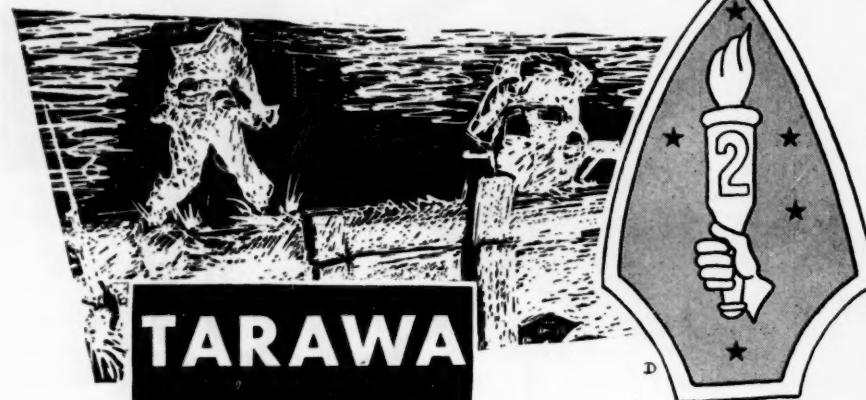
In the truest sense, this work can hardly be called the story of Colt's revolver—it ends with the death of Colonel Samuel Colt (1814-62); the book does, however, measure up to an excellent biography of this man who gave his name to the firearm on which Colt's fame rests.

To some small-arm enthusiasts, this early ending of the weapon's history may be disappointing. Mr. Edwards makes no attempt to alleviate any such feeling. He has accomplished a comprehensive account of an early American, who, at the age of 22, invented the first sure means of rotating a revolver's cylinder and aligning the cylinder chambers accurately with the barrel; who was also inventor of the waterproof cartridge (the forerunner of the cartridge as we know it today) and a successful submarine battery. After an eventful, sometimes unscrupulous life during which at one time he found himself bankrupt, Colt died a millionaire.

For the average reader it's a good yarn in the form of a true life story of a colorful American, interesting and amazing with many lessons concealed in it. For the gun collector it's another fine volume.

Reviewed by Major C. E. Walker

Marine Corps Gazette • May, 1954



sault vehicles. The lessons that it taught were rudely paid for in 990 lives. But the dead of Tarawa died for more than a few acres of coral and sand. They died so that Marines who were to storm the Marshall, the Marianas and the Volcano Islands would pay a smaller price.

Before November 1943, the American people believed that war was not too painful—the casualties had been spread over a period of months. Then at Tarawa, in 72 hours, a part of one division of Marines suffered over 3,000 casualties. Historically, this was not an unusual price. The battle at Bull Run in the Civil War had resulted in heavier losses in a similar time, but Americans had forgotten. True, Tarawa taught Marines, but it also alerted the people to the real meaning and cost of war.

When this battle was over Robert Sherrod wrote a book simply titled *Tarawa*. A correspondent for *Time*, Sherrod had landed in the first assault and had, for three unforgettable

Now, ten years later, a new edition of *Tarawa* is being published. The original text remains unchanged, attesting to its basic accuracy. This new edition includes in its preface the few minor corrections of fact which time has uncovered. Of more interest is a supplement containing extracts from letters written by interested officers ten years after Tarawa. Admirals Nimitz, Spruance and Hill mentioned why the operation was necessary and pay tribute to the 2d Mar Div. Generals Julian C. Smith, Hermle, Edson and Shoup add their remarks, each revealing in his words his pride and faith in the Corps. Others join their comments on this memorable anniversary.

There are other histories of the battle of Tarawa. The U. S. Marine Corps monograph for example is profusely illustrated and as factual as careful research can make it. Yet Robert Sherrod's *Tarawa* still belongs on one's bookshelf. The author was not new to battle. He had been



NCO instructing a recruit in use of the flame-thrower.

ON THE JOB...not "on the way"

VALUABLE TIME OF VALUABLE MEN is wasted when they're moved from one assignment to another by slow surface transportation. Conscious of this non-com instructor's importance — and that of others like him — Transportation Officers usually speed such men on their way — five times faster — by the *Scheduled Airlines*.

YOU CAN HAVE CONFIDENCE in the Scheduled Certificated Airlines, the *only* airlines that operate on regular, dependable schedules. They get your men there and back *on time*. They make your budget look better, too, because Scheduled Air Travel is often cheaper when pay time and per diem dollars are counted in!

Saving the Military Millions of Vital Man Hours with Dependable, On-Time, *Scheduled Service* . . .

NEW LOWER INSURANCE RATES AVAILABLE ONLY ON SCHEDULED CERTIFICATED AIRLINES

Due to the consistent safety record of these Airlines, insurance rates have been reduced as follows:

\$50,000 now costs only \$2.00
\$37,500 now costs only \$1.50
\$25,000 now costs only \$1.00
\$12,500 now costs only \$.50

Policies cover Stateside and much Foreign travel — personal or official.

10% DISCOUNT

for official travel on TR's . . . covers Full Service.



THE *Scheduled Certificated Airlines* OF THE U.S.A.

ALLEGHENY AIRLINES
AMERICAN AIRLINES
BONANZA AIR LINES
BRANIFF AIRWAYS
CAPITAL AIRLINES
CENTRAL AIRLINES
COLONIAL AIRLINES
CONTINENTAL AIR LINES

DELTA-C & S AIR LINES
EASTERN AIR LINES
FRONTIER AIRLINES
LAKE CENTRAL AIRLINES
MACKAY AIRLINES
MOHAWK AIRLINES
NATIONAL AIRLINES
NEW YORK AIRWAYS

NORTH CENTRAL AIRLINES
NORTHEAST AIRLINES
NORTHWEST ORIENT AIRLINES
OZARK AIR LINES
PACIFIC NORTHERN AIRLINES
PIEDMONT AIRLINES
PIONEER AIR LINES
RESORT AIRLINES

SOUTHERN AIRWAYS
SOUTHWEST AIRWAYS
TRANS-TEXAS AIRWAYS
TRANS WORLD AIRLINES
UNITED AIR LINES
WEST COAST AIRLINES
WESTERN AIR LINES
WIEN ALASKA AIRLINES

CHOSSEN by the corps



This lightweight, all aluminum, deadly accurate, internally adjustable SNIPER SCOPE is a superb combat instrument.

For more than fifty years we have manufactured high quality optical instruments for the Armed Services. Our broad experience includes submarine periscopes, fire control instruments, navigation instruments and many other special optical instruments.

KOLLMORGEN Optical CORPORATION
Plant: Northampton, Massachusetts

New York Office: 30 Church Street, New York 7, N. Y.

CHANGE OF ADDRESS

Please notify the Gazette immediately when your address is changed. Each change must include both your old and new address.

NEW ADDRESS:

NAME & RANK (PRINT)

ADDRESS

OLD ADDRESS:

ADDRESS (PRINT)

IF you subscribed at recruit depot, also list your home address:

ADDRESS (PRINT)

MAIL TO: MARINE CORPS GAZETTE
BOX 106, MCS, QUANTICO, VA.

Rise To the Bait...

THE PRACTICAL FLY FISHERMAN—
A. J. McLane, 320 pages, illustrated.
New York: Prentice Hall Inc. \$5.95

If you have floundered through streams and created havoc on lakes flailing a fly as I have, lo, these many years, this book will make you either grab for your fly rod in anticipation of the season to come, or to reach for your trusty .45 to erase the memories of mistakes you have made in the past.

In any case, *The Practical Fly Fisherman* contains grist for the mill of the neophyte or the purist—those lost souls who worship at the altar Waltonian.

Author Al McLane's liquid prose takes you through 13 chapters of fishing lore guaranteed to keep you champing at the bit until the season opens. The marriage of rod and line, the close association of a leader to the type of water being fished and the imitations of natural fish food to be found in fly patterns, are all thoroughly presented.

Then in chapters interspersed with enough fish stories to keep your interest at fever pitch he tells you how to present the bait to the quarry so that it will look like food, how to select the fly adapted to your fishing conditions and how to cast beyond sixty feet.

Technically, he goes into leader sizes and tapers, characteristics of fly lines (including a table of fly line sizes) and the eight knots every practical fly fisherman should know. In addition enough natural lore is given so that the reader will understand what fish feed on, why they eat it and how they go about looking for it.

If the book has any faults, I would say they lie in the fact that author McLane can't get away from his beloved trout. Even in the chapters on fishing for bass and panfish he goes back to the trout in spite of himself, just as though he were impatient to be rid of the spiny scalefish.

I also developed a feeling of resentment against Mr. McLane, who is fishing editor of *Field & Stream* magazine. It is a natural resentment, born of envy for the man who can spend his whole time and make a living fishing, while I am desk bound.

Reviewed by WO Fred Stolley

China Hand "Walla Walla" ...

CHINA TRADER—A. H. Rasmussen.
274 pages, illustrated. Thomas Y.
Crowell Co., New York, N. Y. \$3.95

China Trader lifts you up from the American environment and sets you down into the mystic land of China. Mr. Rasmussen describes his adventures so vividly that the reader feels every adventure has been his.

It takes you back to the early 1900's when a sea-faring Norwegian turns landlubber and sets out through China questing adventure with the wide-eyed expectations of youth. His first impression of this impoverished land of China remain a permanent picture within the reader's mind. The author writes with a flourish of an artist who paints a masterpiece—once seen, it remains imbedded in the viewer's mind.

He starts his life in China doing harbor duty along the Yangtze River . . . there he learns of the struggle the Chinese have had through the centuries in their battle for life—of their nonchalance about living or dying and their strange folklore. Mr. Rasmussen fills pages on end with tales that leave the reader spellbound by the candidness with which he presents the Chinese story; you gasp at the luridness, yet you laugh at the simplicity of Chinese humor and thinking.

The most thrilling tales *China Trader* presents are the stories of the wild boar hunts in the hills of Chinkiang. Mr. Rasmussen writes it as he lived it, right down to the last second when the gun fires.

All in all, *China Trader* is highly recommended for its clear presentation of China . . . of its revolutions, its bandits and its intrigue. Mr. Rasmussen does a wonderful job of 'painting' China into words that carry you into one of the most fascinating stories of the Orient.

Reviewed by Pfc Norma Thomas

Books on Parade

The Atomic Submarine and Admiral Rickover Clay Blair. The story of the *Nautilus*, of its conception, the planning and schooling necessary for its design and of its eventual construction. It includes the story of Admiral Rickover himself. \$3.50

Marine Corps Gazette • May, 1954

Telephones
are very
useful



Alexander Graham Bell - inventor
User of the telephone -

- A Business calls 1. Groceries
- B. Friendly calls 2. Medicines
- C. Ordering calls 3. Meats

Others, including military calls



(Tune - Yankee Doodle)

Telephones are very useful,
If that we're aware.
So when you use the telephone
Just handle it with care.



When some one is in trouble you can
call up people to help you. If some one is sick
you can call the doctor. And if your house is
on fire you call the fire department.

Some of the most interesting illustrations of the value of the telephone come from children. Here are a few, selected from many hundreds by grade-school pupils. They show imagination and a characteristic way of telling a story in a few words. Take, for instance, the words "Telephones are very useful." We couldn't sum it up better than that in a hundred years.

Bell Telephone System

LOCAL to serve the community. NATIONWIDE to serve the nation.



Command Missions, a Personal Story *LtGen L. K. Truscott, Jr.* As blunt as his command procedures, General Truscott's book contains more pungent quotes and more specific advice to future commanders than any other military autobiography. Long after he left it, members of the Army 3d Division continued to call themselves "Truscott's Men!" \$7.50

Platoon Adam Singer. The order from regiment directed the platoon to cross the desert floor, climb the 2,000-foot wind-swept peaks of the enemy-infested mountains and establish defensive positions on the other side. It is a strange story, almost like watching a valiant fight to the finish between 40 ants and an anteater. \$1.25

The Conquest of Everest *Sir John Hunt.* This is the story of how two men, both endowed with outstanding resolve, reached the top of Everest and came back unscratched. \$6.00

Flying Saucers From Outer Space *Donald E. Keyhoe.* The author gives the public "the scoop" on all the saucer sightings. Mr. Keyhoe uses official Air Force reports of actual sightings to prove a point calculated to astound his readers. \$3.00

How to Play Your Best Golf All the Time *Tommy Armour.* This book takes you right onto the lesson tee with Tommy Armour, acknowledged the "Maker of Champions" and probably the most sought after instructor in the country by golfers of all grades. \$2.95

Emden *Prinz Franz Joseph Of Hohenzollern.* A rare British publication. Translated from the German, it presents the story of a famous German raiding cruiser. The hero of the story is Captain von Müller — a foe so worthy the English Government wished to honor him after the war. \$3.00

Small Arms of the World *W.H.B. Smith.* This is the only book that shows you in detail, in almost 900 pictures, how to load, operate, and strip the 175 standard small arms of 25 nations. It illustrates proof marks, gives manufacturers' codes, tells you how to identify weapons, how to evaluate them and gives you full ballistic information on them. \$6.50

MARINE CORPS GAZETTE • BOX 106, M. C. S. • QUANTICO VA.

Subscription Order

Please START or RENEW my subscription to the Gazette:

NAME & RANK (PRINT)

ADDRESS

2 Years

SAVE \$1.70 FROM NEWSSTAND PRICE

\$5.50

1 YEAR

SAVE 60 CENTS FROM NEWSSTAND PRICE \$ 3.00

I ENCLOSE FULL PAYMENT

Signed _____

As a present or honorably discharged member of the Marine Corps or another U. S. armed service I am eligible for membership in the Marine Corps Association upon payment of my GAZETTE subscription. Please enroll me.

THE GAZETTE BOOKSHOP • BOX 106, M. C. S. • QUANTICO, VA

Book Order

My check or money order for \$_____ is enclosed for the following books:

TITLE (PLEASE PRINT)	PRICE*

Send to:

NAME & RANK (PRINT)

ADDRESS

* Members of the Marine Corps Association may deduct 15 per cent from the list price of any book in print. C.O.D.s can not be accepted.



Save \$1.50

TARAWA—*By Robert Sherrod.* Reprinted by popular demand on the tenth anniversary of the Battle For Tarawa. The new edition contains reflections on the battle—reflections made after ten years of thought on the subject by the men who commanded and lived through the bloody fight—General Julian C. Smith . . . Brigadier General David Shoup . . . Colonel Ray L. Murray and others.

(Priced to sell for \$3.50)

BATTLE CRY—*By Leon Uris.* The popular best seller written about Marines in Boot Camp, Marines in training and Marines in action . . . their hopes, loves and fears. *The Philadelphia Inquirer* said about it, "Superb reading, stuffed with action. *Battle Cry* gets under your skin, chokes you up now and then, and leaves you wishing it were longer."

(Priced to sell for \$3.95)

BOTH FOR

\$5.95*

*includes
membership
discount



Marine Corps Gazette
BOOKSHOP
Box 106, MCS, Quantico, Va.

